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# FARM FIRESIDE.

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## What Made Them Leave the Farm?

By WALTER E. ANDREWS

IT WAS Sunday afternoon. Hank Peters, dressed in his best clothes, was making a neighborly call at Deacon Pepperton's home. But somehow conversation lagged, in spite of the visitor's brave attempts to keep up a cheerful flow of words. The Deacon's face was unusually long, and every now and then he sighed dolefully.

"What's the matter, Deacon?" ventured Hank at last. "You seem to have the blues to-day."

"Mebbe I have—'tain't surprisin'."

"Let's hear about it," said Hank, sympathetically.

"'Tain't nothing new," returned the Deacon, feebly, with another sigh. "I'm jest sad, that's all—sad, an' a bit lonesome at times. Mrs. Pepperton is lonesome, too. So's the farm—an' the pony—an' the dog. Everything's lonely. Jest you wait till your own boys an' girls leave home—then you'll understand how we feel."

For a moment there was silence. Mr. Peters, thinking his own thoughts, looked curiously at the speaker's lugubrious countenance. There was sympathy in the look, and yet, combined with sympathy, there was something else in the grave blue eyes that studied the Deacon's face.

"What made 'em all leave?" asked Hank at last, quietly.

"I dunno. First John went, then Mary, then Tom. Now Harry's gone, an' there's nobody left 'cept Mandy an' me—an' the dog an' the pony an' the farm. Well, the youngsters have all got work in the city, an' they're

"Shoo-o! You don't say! Is all that ten cents' worth I bought you gone already?"

"Yes; an' I've got to have more right away."

Suddenly his face brightened. "I'll go over an' borrow some at Hank's house. They buy it by the box, an' are sure to have a plenty." And away he went "cross lots."

Presently he returned, his hands full of soap and his head full of news. "What d'ye think?" he began.

Mrs. Pepperton snatched the soap, and retreated to the kitchen, muttering that she was "too busy an' flustered to think of anything 'cept the washin'."

But the Deacon, eager to unload his store of news, followed her into the house.

"You'll never guess what Hank is up to now, woman! My! I never see sech a feller for fool ideas!"

Curiosity conquered hurry. Mrs. Pepperton's lips and eyes bulged full of questions.

"Well," said her husband, after a dramatic pause, "you mayn't b'lieve it, but that feller is jest a-bustin' himself makin' a croquet-ground out in his side yard under some apple-trees! He's diggin' an' levelin', an' haulin' clay, an' poundin' it down. An' he's bought a croquet-set, an' a big red, two-seated swing, an' two hammocks, that he's swung close together under a spreadin' tree, an' I don't know what else—I didn't stop to see any more." And, panting and growling, the good Deacon subsided into a chair and fanned himself vigorously.

"For the land sakes!" ejaculated Mrs. Pepperton, her mouth wide open with astonishment.

"An' there's worse yet," continued her husband. "Bill Waddle told me this mornin' that Hank Peters had bought a rubber-tired buggy, so's his youngsters could have it to ride in whenever they pleased."

"You don't say! Why, those 'ere Peters youngsters already have bicycles, an' everything else that heart could wish for."

## Doing Head-Work

"Now, you just wait. Don't be in a hurry. Let's work head-work a little. We can do this a good deal easier than you think."

It was a heavy stone. I was young, and had lots of strength then, and wanted to get right down by the side of the great rock and boost it up on the boat by main force. But the old man for whom I was working, a good Down East Yankee, had learned that by "working head-work," as he called it, a little while he could manage such things with much greater ease.

So I stood back and smiled a little, while he walked around the rock, putting a stick of timber here and one there, and finally working his iron bar well under the outside edge of the stone.

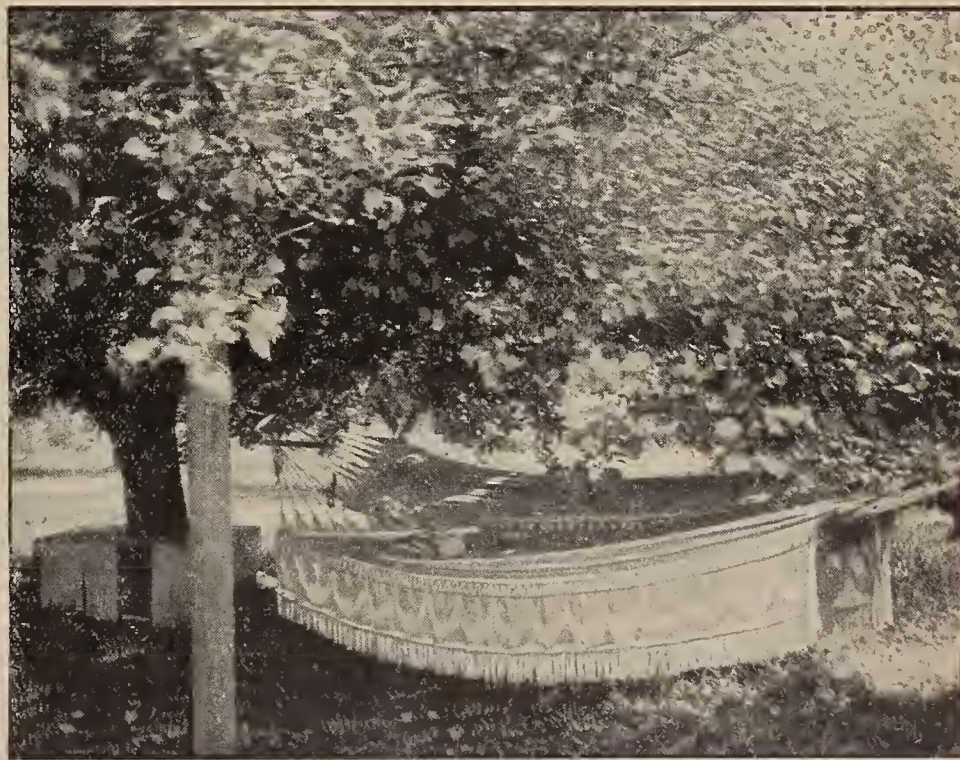
"Now get hold of the bar with me, and we will move things," the old man said. And we did put that heavy rock on the stone-boat without half a lift.

"See, it paid, didn't it?"

And I had to own up that he was right. I never have forgotten my old employer and his "head-work" since that day. Youth feels the spur of strength. On the farm there is a wonderful waste of raw energy. Watch the men-folks on any farm an hour, and you will see that they are far less careful in this respect than they should be. The fact is, about all the capital the farmer has is his strength. When that is gone he is broken down and undone. No matter how much money he has, without health and strength he is at best in a bad way. You can hardly find a man that has reached the age of fifty who has not in some way impaired his capital of bodily strength. A few minutes' conversation with these men, and you have a story of loss of strength in some part or other of the body. And at that age men should be at their best. What has happened that they are not? Simply lavish expenditure of natural forces. We have lugged and



A CROQUET-GROUND AND A BIG RED SWING



TWO HAMMOCKS UNDER A SPREADING TREE

scrapin' up a bare livin' there, I guess, but they could 'a' done better 'round home on the land I calkerlated to give 'em. But no, they wouldn't stay—said they'd had enough o' farmin' to last 'em a lifetime an' longer. Why, to hear them youngsters talk you'd think that a farm ain't a fit or a pleasant place for boys an' girls to live!"

"Some farms are not."

"Eh?" said the Deacon, looking up quickly.

But Hank had an innocent, far-away look in his eyes that disarmed suspicion.

The next day was Monday—wash-day, of course. In the midst of the usual festivities incident to that weekly occurrence Mrs. Pepperton made the discovery that her supply of soap had "run out."

"What'll I do?" she demanded, as she rushed to the back door and announced the discouraging fact to her husband.

"Yep, it looks like a fool business," commented the Deacon. "Somebody oughter warn Hank against sech extravagance. Why, our own youngsters never had no sech pamperin' an' gimcracks when they was at home—no, sir-ee!"

Somehow that last sentence made Mrs. Pepperton look suddenly sober and thoughtful. The silence of the big, empty house seemed all at once to crowd into the kitchen. The clock ticked nervously, insistently.

"Darn that clock!" cried the Deacon, irritably. He, too, seemed to feel the stillness that had suddenly pervaded the room.

He looked at his wife; she looked at him. There was a long pause. Her face flushed—grew pale. Hesitatingly she crossed the room to where he sat, his eyes fixed moodily on the floor. A moist, soapy, wrinkled hand slipped into his, and a soft voice said, sadly, "Mebbe Hank is right, after all."

lifted and broken ourselves down, when by using more head-work we might have kept strong much longer.

A good many times that is why we get tired of farming, and think we must move away to town, leaving the work for some younger man. We have not the strength to do the work ourselves. Had we been more careful in younger days we might have gone on even until old age without difficulty. One of the best farmers I know is an old man well past eighty-five. To-day he is managing his own farm of about one hundred acres himself, while he and his wife do the milking and make up the butter alone. They are wonders of preserved strength. In one season—that of 1902—this old man picked with his own hands more than two hundred bushels of apples, and marketed them in a city ten miles away.

Suppose we all do more head-work, and see how we will come out.

E. L. VINCENT.



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## Mr. Greiner Says:

**YEARS** AGO we were afraid that the cost (about fifteen dollars) of a knapsack sprayer with copper tank might be greater than fruit-growers and gardeners could be induced to pay, and might be an obstacle in the way of the general adoption of the spraying practice. If you will visit the exhibits of spraying outfits made at fruit-growers' meetings or fairs at the present time, you will find the interest of visitors centering in power-sprayers, especially those of the most improved and often most expensive kinds, frequently costing hundreds of dollars, more than in mere hand-pumps, even of the larger sizes. Spraying as a practice has come to stay, and the power-sprayer is the machine of the future for the commercial orchardist.

**DOGS IN THE MANGER**.—It does not look well for the university presidents of the state of New York to come before the legislature to oppose the appropriation so much needed for Cornell Agricultural College. Their action reminds one of the dog in the manger. It is the farmers of the state who are asking the legislature for this appropriation, simply because Cornell College and Cornell Experiment Station have been very useful and helpful to them. No farmer, so far as I know, has ever asked the legislature to appropriate money for any of the other universities of the state—institutions which are not doing anything for the farmer, and in whose existence the farmer is not particularly interested, if, indeed, he is aware of it. Those college presidents might be in better business.

**TESTING SEED-CORN**.—The Ohio Experiment Station, in a bulletin just sent out, expresses the opinion that there will be considerably more trouble than usual this year in getting a satisfactory stand of corn. Much of the corn last fall failed to get fully ripe, or the low temperature of the early winter, coming, as it did, while kernels and cob contained much moisture, injured the germinating power of the seed quite considerably. The station's urgent advice to test all seed-corn in good season, so that a new supply can be hunted up if the first lot proves of low vitality, is certainly timely. The way of testing corn suggested by the station is between sheets of moist paper or cloth placed in a box of suitable size. Several lots may be tested at once and examined much more easily and quickly than when planted in sand. Simply keep the paper moist and where the temperature does not fall below fifty-five degrees. In favorable weather it should all germinate in from four to eight days.

**CITY AND COUNTRY**.—We frequently hear about the "slavery of farm life." True, farming if properly attended to often means hard work, and on some days long hours; but if rightly and successfully managed it cannot be otherwise than a labor of love, requiring the use of brains, of thought and study. The right kind of farmer masters the soil with his head more than with his hands. The city merchant, the store clerk, the city laborer generally—and this includes physicians, teachers, professionals, and often millionaires—all have far greater reason to talk about the "slavery of city life" than the modern farmer, who has no boss, is not kept imprisoned for ten or twelve hours of the day in a dingy room, and whose whole life is the most satisfactory combination of congenial work, both of brain and hand, with perfect independence, and the purest of life's pleasures and blessings.

has reason to talk about the "slavery of farm life." Let us appreciate our advantages and make the most of our opportunities, rather than indulge in such slurs on our occupation as that which is expressed in the absurd phrase "slavery of farm life."

**LOCAL ADAPTATION TO CROPS**.—One of our friends, who lives near the Indian River, Florida, talks quite enthusiastically about pineapple-growing, and of the prospects of those Northern people who have settled there for getting rich from this crop, which is grown on land too poor to raise cow-peas, and with commercial fertilizers only. The crop is claimed to bring from three hundred to seven hundred dollars an acre. Florida, with its mild climate and cheap lands, may offer tempting inducements for Northern settlers (especially if some of the drawbacks are left out of consideration), but it is not necessary to go there, nor to California, nor to any country with a mild winter climate, to find a crop that will bring three hundred dollars or more an acre. We often do that here with Bartlett pears, which is a crop that seems especially adapted to our own immediate vicinity. The peach-growers along Lake Ontario in this county, whose locality is especially adapted to that crop, are also getting hundreds of dollars an acre from their peaches, and they are getting rich. In short, there are various localities and districts particularly well adapted to the culture of certain fruit or other crops, and we will try to profit by the opportunities that they offer us, without feeling called on to rush all at once into the pineapple business in Florida.

**AGRICULTURAL COLLEGES**.—"Why is it," asks Professor Massey, of North Carolina, "that the great state of New York, which can afford to spend about seventy-five thousand dollars annually on an independent experiment station, . . . cannot have a great agricultural college, and not a mere appendage to a great literary university?" There can hardly be any doubt that the best and most effective work in fitting boys for their life-mission as modern farmers cannot be expected from an institution that is hampered by such connection. The agricultural college at Guelph, Ontario, under President Doctor Mills, shows what great results in educating the farmers and the farmers' boys can be achieved by an independent college. A state like New York, that can spend a hundred million dollars for a canal of doubtful general usefulness, and large sums as a sop to politicians, should not make the plea of poverty when a few thousand dollars are asked for an agricultural college. The boys of the state are entitled to such consideration. While at present the farmers of the state will have to get along as best they can with that "appendage" at Cornell, and ask for its adequate support at the hands of the legislature and state executive, the time will come when the people of the state will insist on having a separate agricultural college, and such facilities for training in the public schools, besides, as the farm boy requires to best fit him for his life's work on the farm.

**LEGITIMATE WORK FOR THE STATIONS**.—It may fairly be questioned whether an experiment station should be made to do police duty for the state, as the legislators of the great state of New York appear to expect of the station at Geneva. The fertilizer "control" undoubtedly belongs to the proper sphere of business for the state department of agriculture, not for an "experiment" station, unless the title is an entire misnomer. The work cut out for an experiment station consists chiefly of research and investigation, and the dissemination of the knowledge and results gained, by publication and otherwise, for the farmers' benefit. If the station is to be burdened with the duty of examining and analyzing every brand of fertilizer sold in the state, it should be done with the one object of publishing to the farmers the results of their investigation, so that the users of fertilizers may know what they are buying, and be in position to protect themselves. The laws and practices relating to these things in New York State at present are absurd in the extreme. The station director is enjoined from publishing to the farmers the fact, when found, that a fertilizer manufacturer's goods do not come up to his guarantee, for fear of being made the defendant in an action for damages by the offending firm. Lawmakers should at least use common sense.

**SCARING THE BIRDS**.—A reader in California writes me that the chief robber they have to contend with in his vicinity (Alameda County), is the English sparrow, there being but few robins, and these under the protection of the law. For scaring the sparrows he makes use of the old device of hanging a mirror in the tree, or in each tree liable to bird attack. He says: "Take a pole long enough to reach about three feet above the highest limbs or branches. At the end of the pole nail a light stick (a piece of lath will do) about two and one half feet long at right angles with the pole. Tie a piece of string, say two feet long, to the outer end of the stick, and to this string fasten a little pocket-mirror, such as you can get for about one dollar a dozen. When all is ready, I work the pole in between the limbs of the tree, and lash it to the body of the tree. You can raise or lower the pole as you see fit by driving a nail in the pole to hold it in place. I first use the pole in the cherry-trees, then in the Royal apricots, then in the Moreparks, and so on, as different fruits begin to ripen. Of course, it is the sun's rays reflected in the mirror which give the birds a thorough scare, and possibly keep them entirely away from the tree. Even on cloudy days, if there is a breath of air stirring, the mirror will keep turning and twisting, and throw reflections which scare the birds. For large trees several crosspieces six or seven feet long might be nailed to the pole, and a mirror hung at each end." My experience is that the sparrow is more easily frightened and kept away than the robin. Here, where the robins are so plentiful, I am afraid that the mirror plan will not be as effective in saving our cherries, etc., as it was found in California against the English sparrow. I would gladly exchange a few hundred, or even thousand, of our wealth of robins for that many sparrows. I will try the virtues of a few dozen mirrors, however, and report the results of their use later on.

## Mr. Grundy Says:

**GETTING A HOME**.—A FARM AND FIRESIDE reader who lives in Ohio tells me he has been living in a rented home twenty-one years, and he says he has paid out enough in rent to buy him a fine mansion. He says: "In reading your articles about owning one's home I made up my mind that I would own a spot of earth I could call my own if I had to wear rags to get it. Two years ago I began saving up every penny I could spare, at the same time looking about for a suitable spot that I could buy. I work here at the depot about twelve hours a day. The work is not hard, but there is a good deal of it to do. I have to be here at six in the morning, and stay until six in the evening, and get thirty dollars a month. About a month ago I bought two acres adjoining the railroad, about sixty rods from the depot, and paid for it. Now, how would you advise me to proceed? We have a local building and loan association. Would you advise me to go into it, and borrow money, and build a little house, or to go on saving as before until I save up enough to build?"

I would advise him to borrow from the association, and build at once, and stop paying rent. The rent he now pays will pay the association dues, and every dollar he turns over to the association is a dollar paid on the debt, and in a few years he will find himself the proud owner of a home. On his two acres, with the assistance of his good wife, he can raise a nice lot of chickens and all the garden vegetables they will need, besides all the smaller fruits in abundance. A dozen gooseberry-plants, and the same of currant, raspberry and blackberry and grapes, will supply him along that line. Consult some neighboring farmer who grows these things, to learn the best varieties. About six apple-trees—two each of summer, fall and winter varieties—are enough. Six each of Early Richmond, Montmorency and English Morello cherries will probably yield more fruit and satisfaction than anything that can be planted. A good row of asparagus is one of the first things to establish. All these things will require a little cash, but by obtaining the plants from farmers and others who have these things in their gardens the outlay will be very small. Get all of these things planted as soon as possible. It takes time to make a bearing plant, vine or tree, and the sooner one gets them started the sooner he will have fruit. I know a man who works about twelve hours a day who bought a half-acre lot with a small house on it six years ago. He was able to pay only fifty dollars down. The place is now paid for, and last year his children sold nearly a hundred dollars' worth of fruit and vegetables, and they had all they wanted for the family table besides.

A reader living in Cleveland comes at me with a few hard questions. He says: "I was raised on a farm, but have lived and worked in the city over twenty years. I would like to go back to the country. Have saved up two thousand dollars, but I see that the price of land has risen until it is almost out of sight—eighty to a hundred dollars an acre in the section I would like to go to. My two thousand would hardly buy a potato-patch. Will you tell me what you think about tenant-farming? Would you, if you were in my place, rent a farm until you could get ahead enough to buy one?"

I positively would not. I would advise this man to remain where he is fifty years rather than to try tenant-farming. Probably one in a thousand like him might succeed in tenant-farming, but the chances are against all. In the first place, he is out of practice, he has a family, and he is no longer young and strong. Farming is not what it was twenty years ago. To the man who has been actively at it during this time it has improved vastly, but to the one who has spent this time in the city it has become a problem. He says he has two boys, and he wants to get them out among "God's free, fresh air and pure, sparkling water, and close to the heart of Nature." He has my heartfelt sympathy, but the only plan I see for him to follow with any prospect of success is to buy a small tract—five acres or so—not far from some town, and grow truck and work at odd jobs.

Not long ago I received a letter from a farmer in Missouri, from which I clip the following: "I wish you could induce a thousand good, steady, able-bodied married men to come out West and buy little homes—little tracts of one to three acres—and build and settle down on them. We need help on our farms, and are unable to get the sort we want. The town man is not much good. Occasionally we can get a good hand from among the hand-to-mouth men who live in the villages, but not often. Just when we need them most they meet with a little job in town and stay with it. They are as unreliable as the wind, and as they are living in rented houses, they are liable to pick up and leave almost any day in the year, because they have no permanent interests. I have been bothered with such help until I feel like renting the farm and sitting down the rest of my days. Then, if I rent the farm, I can rest assured that it will begin to go down from the day I leave it. If we could induce men to buy little tracts, build homes on them where their wives can raise a few chickens and a garden while they work for us on the farm, I think we would be in clover. They could live at home, and we would not have to board them, while we could call on their wives for help in the house in time of a rush; and as they would be permanent residents, they would be interested in what we are, and we would feel like they were neighbors more than hired people."

One would think such people would make ideal farm-help, but the inducements to live in town have been so much better that very few have built homes in the country. I know several men who own little homes in the suburbs of villages who make excellent farm-hands, but the trouble with the best of them has been that they gradually added to their own possessions until they had all they could do at home.



## Farm Theory and Practice

**THE POTATO CROP.**—One hundred millions of dollars is an immense sum of money, and yet it is no more than the market value of the potato crop of this country in a good year. In eleven years we grew a thousand million dollars' worth. The average returns to the acre are far greater than those of most staple crops. The profitability of potatoes has called much attention to the crop, and there have been years of great overproduction, temporarily destroying profit; but growers who have a soil adapted to potatoes, and who have a good local market, have fair assurance of good returns for their labor and skill. I am sure that there are but very few field-crops that possess greater possibilities.

In potato-growing, the market is the first consideration. Where it is good, the soil must indeed be bad if it cannot be so fitted that the local supply of this crop, at least for early summer and fall, may not be produced at a profit. Where this is not done, the fault often lies with the farmer. Having never made potatoes a specialty, he does not understand their exacting needs.

**EARLY POTATOES.**—Where there is a good local market, early varieties usually are more profitable than later ones, but they require a warm, rich soil. The drainage, either natural or artificial, should be good. If the soil is heavy, nothing improves its physical condition like rotted organic material thoroughly mixed through it. Clover-roots and turf or rotted stable manure are good. Fresh manure lets scab-germs multiply, causing roughness of the skin of the tubers. A satisfactory way is to apply the manure on the sod the year preceding the potatoes.

The soil should be a warm one for early varieties, because early planting is essential when one wants to go into an early market. Moreover, most early kinds of potatoes do not stand drought well, and are subject to early blight, and the more quickly growth begins in the spring the better the chance of good yields.

Heavy soils usually may be plowed in the fall with advantage, as the exposure to frost increases mellowness, and there is less delay in preparing to plant. Lighter land, where there is little protection by snow, may lose too much fertility from exposure to justify fall plowing; but such land can be plowed very early in the spring, and is quickly fitted for planting, so that little time is lost.

**ONE CAUSE OF FAILURE.**—Many a failure to get a paying yield of potatoes is due to poor seed; indeed, such seed is a leading cause of failure. This is especially true in the states that have enough heat for winter wheat, as potatoes do not keep their full vitality outside of a cold climate. The summer's heat impairs vigor while the vines are growing, and the seed often is not kept unsprouted until planting-time. Then, too, there is carelessness in selection. Some one uses the "seconds" for planting, and gets a good crop, and this is accepted as proof that small potatoes are as safe for planting as large ones. When small seed does well, it is due either to the fact that the soil is very rich, forcing the growth of plants that are naturally weak, or else the small potatoes are the late sets on vigorous vines, and not the product of weak vines at all. As a rule the "seconds" of a crop contain all the runts, or weaklings, and for this reason their continuous planting reduces the vitality of the stock.

The first sprouts of a potato are the most vigorous ones, and badly sprouted seed cannot make a full yield. Early varieties of potatoes start sprouts as soon as they are exposed to spring heat, because they were matured early the previous season. Unless one has cold-storage quarters, it is best to have a late fall-grown lot to use for planting, or else to buy seed grown in a cold climate. Practically, the right thing for growers in the states mentioned—any section having heat enough for the largest yields of corn—is to buy seed-potatoes from points further north every year. Very many farmers who have poor success with this crop would get paying yields if they would discard their home-grown stock and procure a supply of vigorous seed from the North.

The earliness of a crop for market depends much upon the number of sets in the hill. The variety that does not set freely is desirable, because larger pieces of seed can be used. Two good vines in a hill of potatoes for early market are enough.

One secret of success with any crop is a good stand of plants. Missing and weak hills cut yields. One rarely sees a stand of potatoes that is practically perfect, but a successful grower comes pretty near it by examining every tuber. This is done when cutting by hand, watch being kept for any damaged tubers. Cutting-machines cannot do first-class work.

**FERTILIZERS.**—Early potatoes require more available fertility than late ones, both because growth is rapid, and because growth is wanted before the soil provides available plant-food freely. Unless the clover-sod is heavy, or rich manure has been used, some nitrogen should be applied in the form of a commercial fertilizer. Nothing is better than nitrate of soda, put on as soon as the plants have made some

## All Over the Farm

root-growth. Ordinarily some acid phosphate also is needed, and potash may pay. Liberal feeding of early potatoes may pay well when a late crop would get its fertility from the land, because the growing is done in warmer weather and over a longer period of time.

**THE PLANTING.**—The depth of planting should be greater in a light soil than in a heavy one, but ordinarily potatoes want comparatively deep planting and rather light covering. The seed makes its best sprouts when lying close to the light. The shallow covering helps the sprouts to be stocky, and the soil should be worked into the furrow as the plants appear through the surface. That is a good time to distribute in the furrow any commercial fertilizer that is to be used.

**THE TILLAGE.**—I like one deep cultivation after all the plants get above the level of the surface. At that time the furrows have been filled, and the deep tillage helps to make the plants root down, and it loosens the ground that has been packed by the rains. After that, the chief thing to do is to prevent any weed-growth and to hold the moisture in the ground. If extreme earliness is a prime consideration, more shallow planting and some ridging may assist, but it is often at the expense of the yield. DAVID.

## Money in Flax

One of our consuls in Germany urges farmers in the United States whose land is suitable for flax culture to turn their attention to raising it the coming season. He says that eighty per cent of the flax used in the linen-textile districts of Germany comes from Russia; but an unprecedented shortage in this year's flax crop in that country has led not only to a sort of corner in the raw material, but to a perfectly natural advance in its prices, amounting since the first of last October to about twenty-five per cent. So seriously is this rise felt that already far-reaching limitations in linen-production have been determined upon, and unless a supply shall be obtainable from some other source, these limitations must remain imposed for an indefinite length of time.

Not only does Russia furnish the factories of Germany with flax, but also those of England and Scotland. It is now known that fully one third of this year's crop of flax in Russia has been ruined, owing to early and heavy snows, and the residue is totally insufficient to meet even present demands. In consequence of this shortage there has been a sharp rise in the market, and even at a high figure practically the whole crop is controlled by a few people. The shortage is undoubtedly such that it cannot even be made good by a successful Russian crop in 1904.

People can generally be found in every locality who are sufficiently familiar with the process of retting and swinging, and each community could have the raw

will make wonderful efforts to survive in spite of both the grain crops and the weeds.

I have found buckwheat to be the best crop to sow clover with. The buckwheat and clover are sown together about the first of July with a grain-drill. The buckwheat is an exhaustive crop, but, fortunately for the clover, the roots stay near the surface; the clover-roots go down below the roots of the buckwheat for their supply of moisture, and both grow quite rapidly until the buckwheat comes off, about the first of September, which is too late for weed-growth. The buckwheat-stubble serves as a mulch in the fall and a protection to the clover during the winter. I have practised this plan for the past five years, and have not failed to get a stand of clover.

Clover sown with buckwheat made a good stand in the driest of seasons on the very same land where I had repeatedly failed to get a stand with both wheat and oats. The land is in much better shape to grow a crop of clover after buckwheat than it is after either wheat or oats, as it is free from both weeds and weed-seed, and the surface does not bake so bad.

West Virginia.

A. J. LEGG.

## Raising Vetch for Seed

I noticed an inquiry in your paper in regard to raising vetch for seed. We Oregon farmers sow the vetch in fall or spring with wheat or oats at the rate of thirty pounds of vetch and either one bushel of wheat or one and one half bushels of oats to the acre. When ripe, we cut the crop with a self-binder or mowing-machine, and thresh as we do any grain. The mixed seed is then run through a good fanning-mill, to separate one from the other. The wheat or oats is sown to hold the vetch up off the ground. Clover is not strong enough to hold it up.

Vetch makes good sheep and hog pasturage, but care must be taken not to pasture too late in spring, for the vetch will not fill. It is used for silage and hay for cattle. It does not make very good hay for horses, as it is too washy.

Ground that has had two crops of vetch is benefited nearly as much as if sown to clover, and will grow good spring wheat. J. H. GRIMES.

## Not Transferable

The man who can see in his waving wheat-field, blooming orchard, growing clover and grasses, and in the marvelous upreaching of his corn, only the bushels and tons of the time of harvest is missing the evangelizing influences that beautify the life of the true countryman. The man who misses not these good influences is taking into the complexity of his life things that perhaps have little or no market value, that are of no use toward endowing seats of learning, that are capable of no post-mortem administration; but they are things he would not be without, and which the man who has them not cannot buy at any price. MCSARRAN.

## Farm Notes

The fact is not generally recognized that the Bordeaux spraying mixture when used for destroying insects and fungus acts also as a fertilizer and promotes tree-growth. Apples should be sprayed just before blossoming, as soon as the blossoms open, and again in about ten days. Winter apples should be sprayed about twice more—near the first and last of September.

It is a matter for congratulation that Mr. Luther Burbank, of California, originator of the potato that bears his name, has by no means abandoned the idea that further improvement in this indispensable article of food is possible. At present he is experimenting with from twenty thousand to thirty thousand seedlings and hybrids, having for his ultimate object the production of a potato that will be sweeter than the common one, will have more of the color of the flesh of the sweet-potato, and possess other superior qualities. Mr. Burbank's wonderful success in the past amounts to a guarantee that he will succeed in his present most laudable effort.

We have become so accustomed to planting young trees that we seldom think of planting tree-seeds. The

"Gardener's Magazine (England) says: "The best way to rebeautify barren and uncultivable lands is to sow tree-seeds broadcast, and leave Nature to do the task of thinning out the worthless ones. Seedlings will adapt themselves to rough places better than transplanted small trees. The poplar, the willow, the ash and the sycamore are especially recommended, and of these the last two are of the greatest economic value, because of their suitability for timber, which is here used as supports in coal-mines." In this country other kinds of trees that can be grown from seeds may be more desirable, particularly the nut-bearing trees. \*\*\*

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A PENNSYLVANIA PASTURE

fiber treated at a central plant, as is done in the case of creameries, etc.

Europe is eagerly hoping for a fresh source of supply beyond the insufficient and often unsatisfactory market of Russia.

At the high prices now prevailing, the raising of flax would be a very profitable occupation, and at the prices obtainable in previous years it would still be a good crop for the farmers in the United States to raise, as the supply never equals the demand.

L. F. C.

## Clover

I have tried sowing clover-seed with wheat, and also with oats, a number of times. Usually these efforts to get a stand of clover proved failures. The clover would not make much growth until the grain crop was removed, then after harvest the weeds would spring up, and smother the already weakened clover-plants. If, however, there is an abundance of available plant-food suitable for the demands of the clover, it





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## Gardening

By T. GREINER

**O**F THE EVERBEARING STRAWBER-  
RIES I will once more plant a  
number for trial. But are they  
really worth all the fuss that has  
been made over them?

SOME GARDENERS make a practice of  
soaking most small seeds before plant-  
ing them in the greenhouse or hotbed.  
I have sometimes done this in particular  
cases or for special purposes, but never  
found it necessary as a general practice.

THERE IS NO DOUBT any more that  
the planting will be done very late this  
year. We have often plowed and planted  
during the latter part of March. It is  
close to the middle of March at this writ-  
ing, yet the ground is still tightly locked  
in frost's embrace, being frozen down to  
the depth of four or five feet, and  
sleighs still being made use of.

A GOOD LATE SWEET-CORN.—A reader  
has looked through the catalogues for  
Shoe-peg sweet-corn, but is unable to  
find it. Most seedsmen offer it under the  
name "Country Gentleman." It is also  
catalogued as "Shoe Peg," "Ne Plus  
Ultra" or "Quaker Sweet." Burpee says  
Country Gentleman is a cross of Ne  
Plus Ultra and Stowell's Evergreen.  
Under whatever name you may get it, it  
is a first-class late sweet-corn for the  
family garden, very sweet and tender,  
yet not really what I want for market.  
The old Evergreen still fills the bill where  
appearance counts more than quality.

TOOL FOR CUTTING TARRED-FELT COL-  
LARS.—Mrs. McW., of Anita, Iowa, asks  
where she can buy a tool for cutting the  
tarred-felt collars mentioned by me in  
these columns in the February 1st issue.  
Such a tool has not yet been put on the  
market to my knowledge. The only  
way to get it is to get a blacksmith or  
mechanic in your vicinity to make it for  
you from description. It may be found  
illustrated and described in some of the  
later garden books, and also in a bulletin  
issued years ago by the Wisconsin Ex-  
periment Station. I had such a tool  
made six or eight years ago, and it  
worked perfectly. If nobody else goes  
at it before long, I shall have dies made,  
and these collars cut and put up for the  
trade. They are really a useful article.

POTATO-ENEMIES.—A reader in Custer  
County, Montana, asks me to "tell of  
something good to kill the potato-beetle,  
and also another small bug with a striped  
back which comes first." In one of the  
earlier issues I have already mentioned  
"disparene," or arsenate of lead, as one  
of our most promising remedies for the  
yellow-striped cucumber-beetle. I use  
this also for potato-enemies, especially  
the Colorado fiend. What the "small  
bug" can be is not quite clear to me. It  
may be the common flea-beetle, a rather  
troublesome pest, which, however, can  
be kept in check by thoroughness in  
spraying with Bordeaux mixture. All  
leaf-eaters, however, will quickly suc-  
cumb to the treatment with "disparene,"  
if this is used freely. It is safer for the  
plants than is Paris green, and I am in  
favor of using far stronger doses of the  
"disparene" than of Paris green.

WORMY RADISHES.—The past season  
has been the worst for radishes that I  
can remember. Planted every few days,  
as usual, with the same care and in just  
as good ground as ever, and in this spot  
and that, the results were uniformly the  
same—wormy radishes. In other years  
we hardly ever sat down to a meal during  
the entire summer but what we had a dish  
of crisp radishes, freshly brought in from  
the garden, on the table. In 1903 we  
hardly had a mess of really first-class  
radishes at any time. Common salt freely  
strewn over the bed when the plants are  
well started is often recommended as a  
remedy, and has usually seemed to be of  
some service, although less effective last  
year. Should we have a repetition of  
the trouble this year, I shall plant a little  
bed in some out-of-the-way spot, in good  
new soil, make the rows close together,  
say not over four or five inches apart,  
and then soak the ground occasionally  
with strong lime-water, using fresh-  
burnt lime, and manure-water for slaking.  
The worms don't like caustic lime, and  
the radishes will likely be clean and nice.

BRUSHING PEAS.—A. B. G. wonders  
what "large gardeners use to brush peas  
with." Brushing the taller varieties of  
garden-peas in a suburban home garden  
where trimmings of fruit-trees, etc., are  
available, or the expense of common  
poultry-netting a foot or eighteen inches  
wide is of not much consideration, is a

good and commendable practice. In the  
farmer's garden, however, where we have  
no need of being very economical with  
space, and where the family needs call  
for long rows of peas early, medium,  
late, and perhaps very late, we try to get  
along without brushing them or sup-  
porting them in any way. Nott's Ex-  
celsior is very dwarf—too dwarf for me—  
and not productive enough. The soil for  
it should be extremely rich. For earliest  
peas I plant the Alaska, a blue pea, pre-  
ferably on good garden land. This grows  
eighteen inches or two feet high, or  
rather will fall to the ground and then  
turn up again, giving me a fair chance to  
pick the pods. There are a whole lot of  
other medium-tall sorts, such as Hors-  
ford's Market Garden, Telephone, Strat-  
agem, Abundance, Everbearing, Quality  
and Quantity, etc., which one can use  
on a larger scale or for any place where  
brush is not available.

ARSENATE OF LEAD is largely adver-  
tised ready-made in paste form under the  
proprietary name "disparene," but it is  
easily and cheaply made at home. Being  
largely used as a remedy for the gipsy-  
moth in Massachusetts, it was also known  
at one time as "gipsine." It is made  
from acetate of lead, or sugar of lead,  
one of our well-known common drugs,  
and arsenite of soda. Simply dissolve  
eleven ounces of the sugar of lead and  
four ounces of the arsenite in one hun-  
dred and fifty gallons of water, and to  
make it stick all the better to the foliage  
add a couple of quarts of molasses or  
glucose. I prefer to apply it in the Bor-  
deaux mixture, in the same way as I have  
been in the habit of using Paris green.  
When buying "disparene," the paste  
should be measured or weighed out for  
each separate mess of Bordeaux mixture,  
and then well thinned and mixed with a  
smaller quantity of water, so that the  
pasty mass will have a chance to become  
well distributed all through the whole  
body of the liquid, as otherwise it might  
all remain hanging together, and not im-  
part its full effectiveness to the spraying  
mixture. My advice is to use plenty of  
this poison in the mixture. It will do no  
harm, and if strong enough it will be all  
the surer in effect and more lasting.

## Fruit-Growing

By S. B. GREEN

**T**HE GARBER PEAR.—C. H. W., Con-  
neautville, Pa. The Garber pear  
has seldom proved a profitable  
pear to grow for market. It blights  
to some extent, and the fact that the fruit  
is not nearly as desirable as the Keiffer  
has prevented the planting of it.

SAN JOSE SCALE.—O. P., Geneva, Ohio.  
In regard to the prevention of San Jose  
scale, it seems to me that you had bet-  
ter correspond with the entomologist of  
the Ohio Experiment Station, at Woos-  
ter, Ohio, as he is in the best position to  
advise you as to the proper treatment  
for getting rid of this pest, and should  
know where it is found in Ohio.

POND-LILIES IN TUBS.—O. H. S., Still-  
water, Minn. It is customary to grow  
water-lilies from the roots. These may  
be obtained from lakes and streams  
where they grow. Many of the Eastern  
nurserymen and seed-dealers now handle  
them. A good way for you to do would  
be to get some boy to dig the roots for  
you after the leaves appear in the spring.  
The roots could then be planted in a  
tub in the garden, in which should be  
about four or five inches of good, peaty  
loam. There is no special care required  
to grow them, except to see that they  
have water over them all the time. They  
do not grow readily in water that con-  
tains any considerable amount of alkali,  
but the ordinary soil and water of east-  
ern Minnesota are well adapted to them.  
The planting had better be done in the  
spring, as roots can then be obtained.

SAN JOSE SCALE IN PEACH ORCHARD.—  
J. O. R., Princess Anne, Md. The  
only way in which you can determine  
whether or not your peach orchard is  
affected with San Jose scale is by mak-  
ing a careful examination. If you are  
not sufficiently familiar with this insect  
to do this yourself, you could take off  
twigs and send them to your state en-  
tomologist or to me; but the best way  
would be for you to have the whole or-  
chard examined by your state entomol-  
ogist, and I should be suspicious of the  
whole orchard until an examination of  
this sort had been made. If the San  
Jose scale is present, it is as yet un-  
doubtedly only in small quantities, and  
can probably be destroyed, while if it is  
allowed to multiply until its injury is  
very apparent it will perhaps be out of the  
question to destroy it. Whitewash will

do some good on the trees, but is not an  
effectual remedy against San Jose scale.  
The wash known as the lime-sulphur-and-  
salt wash is far better, and is quite effec-  
tual. I think you had better get in touch  
with your state entomologist in regard  
to this matter at your earliest conveni-  
ence. His address is Willis G. Johnson,  
College Park, Md.

LOCUSTS IN NORTHERN IOWA AND  
MINNESOTA.—C. H. N., Houston, Minn.  
There is quite a difference in the adapta-  
bility of trees to the climates of the  
eastern and western portions of southern  
Minnesota and northern Iowa. The  
honey-locust reaches its furthest north in  
southeastern Minnesota, and can hardly  
be considered satisfactory in southwest-  
ern Minnesota, although it will hold on  
in that section for many years. This is a  
rapid-growing tree, the timber of which  
is durable and desirable for posts. The  
yellow or black locust, however, follows  
the Mississippi Valley up as far as, or  
perhaps a little further north than, Min-  
neapolis, is a much harder tree than the  
honey-locust, and is probably a more  
rapid grower and more desirable for gen-  
eral planting in shelter-belts and for  
posts in Minnesota. In growing either  
of these trees, the seed had better be ob-  
tained from near its northernmost limit.  
The pods that contain the seed generally  
remain on the trees over winter. In the  
case of the honey-locust, I think the form  
known as "Inermis," which has no thorns,  
is much the best to grow. This is found  
in some places along the Des Moines  
River in Iowa. The seed should be  
treated with hot water, so as to cause it  
to swell, just before planting, otherwise  
only a small percentage of it will grow  
the first year. In planting this tree I  
think the best way to do is to sow the  
seed in nursery rows, and then trans-  
plant when they are one year old. The  
seedlings should be carefully protected  
the first year, as they are somewhat ten-  
der when very young.

### Some Orchard Notes

I would suggest the following combina-  
tion for an orchard fertilizer: Fourteen  
hundred pounds of unleached wood-ashes,  
four hundred pounds of ground bone  
and two hundred pounds of nitrate of  
soda. For economy in the handling, it  
should be thoroughly mixed before ap-  
plying. The amount given to each tree  
should be not less than ten pounds. The  
financial ability of the orchardist is about  
the only limit needed in that direction.

In reading on the subject of pruning,  
it brings to mind some of my experiences  
in pruning the peach. When working  
among my trees, I noticed at the ends of  
many of the branches for the space of a  
foot or eighteen inches there were no  
leaf-buds, and by cutting away those bar-  
ren stretches of growth the trees assumed  
a more stocky appearance, and were bet-  
ter able to carry their loads of fruit. If  
those portions are not cut, the sap must  
flow to the terminal bud to find an out-  
let, and the trees put on those long wil-  
lowy growths. On general principles I  
am not in favor of much pruning. I  
think if a tree is judiciously pruned the  
first four years it will need but very little  
afterward. I found it to be especially  
good with the pear to cut back one half  
the growth the first four years, leaving  
the upper buds always toward the out-  
side, thus making a low-spreading top of  
great carrying power. Fruit-trees can-  
not be headed too low; at least, that is  
my experience. Yours truly,

W. A. MARSH.

[While the formula recommended  
above will furnish a large amount of  
plant-food, and undoubtedly prove satis-  
factory, yet it seems to me that just as  
good results could be obtained at less ex-  
pense by using less or other chemicals.  
Wood-ashes\* is of such uncertain value  
that I always hesitate to buy it unless  
I can buy on analysis. Nitrate of soda  
is very effective, but it is soon washed  
out of the soil if not at once taken up  
by the plants. It is very expensive, and  
I think it is seldom that so much as two  
hundred pounds to the acre is needed  
for orchards. I am inclined to think that  
in many sections a cheaper and more  
practical formula for an orchard would  
be three hundred pounds of fine ground  
bone, one hundred and twenty-five  
pounds of high-grade muriate of potash  
and fifty pounds of sulphate of ammonia  
or nitrate of soda.

Of course, in pruning pear-trees it  
would not do to always prune to an out-  
side bud, for some varieties—as Nelis,  
for instance—are too spreading naturally,  
but what you say would apply to all of  
our upright sorts.—Ed.]

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## Poultry-Raising

By P. H. JACOBS

### Appliances for Spring

THE poultryman should have a complete outfit of his own, especially for the poultry department. The root-cutter, which shaves or cuts beets, carrots, cabbage or any kind of vegetables, will prepare food of this character in such a manner as will permit the fowls to easily pick the food to pieces. The sprayer is indispensable, and a wheel-hoe is excellent for cleaning the yards by loosening the top soil, or a hand-plow or hand-cultivator may be used. A bone-cutter, feed-cutter (one that cuts fine) and a small grinding-mill should be among the list of articles. The bone-cutter cuts (not grinds) green bone, and the bone-mill grinds hard bones and oyster-shells, as well as wheat or corn. The work of destroying lice and disinfecting the poultry-house can be done in a few minutes with a sprayer, when such work would require an hour or so if performed without its aid. On light soils a hand-plow will take the place of a spade in turning up the top soil, and the work can be done in a short time, as well as in a satisfactory manner. Of course, where the flock has the run of a farm such work may not be required, but when the fowls are confined in yards they demand care and labor which is costly in proportion to the appliances that are used for the purposes in view.

### The Quantity to Feed

It is not necessary to feed a flock more than twice a day, as the noon meal may so satisfy the fowls that they will not be induced to scratch. The object should be not to keep the hens supplied, but rather hungry. Too much indigestion, due to frequent feeding, is the cause of many hens not laying. Scratching is sometimes more important than feeding. The half-fed hen that has to hustle for her living will be laying eggs when the overfed hen is quietly digesting the food in her well-filled crop and waiting for her owner to bring more. To properly feed the hens they must be treated as individuals, and not as flocks. A lot of hens may eat two quarts to-day, and only one quart to-morrow. Weigh the food, and also the quantity that is left over—you will then know how much the hens will eat at a meal; that is, for that particular meal. In the morning give them just one half the quantity they ate at the test-meal, then scatter a gill of millet-seed in some litter, and let them scratch. At night

overlook the fact, also, that when poultry sells low you have a very good market at home on your own table. The farmer is the proper one to enjoy the luxuries of the farm, and he makes a mistake when he sells poultry at a low sum and buys beef at a greater cost. The home markets are large, and if supplied as they should be would not leave as large a surplus to be disposed of as many suppose, while prices would be higher for that which is sold off the farm. If one has more poultry and eggs than can be consumed at home, it will pay to try the nearest markets by getting the fowls fat and assorting the eggs so as to have them uniform. An attractive appearance greatly aids in securing higher prices.

### Precaution Against Disease

That which causes more outbreaks of disease among flocks than anything else is the bringing on the farm of fowls from other farms or places. The farmer or poultryman orders a pure-bred male, or purchases a trio, and when they arrive there may appear no sign of disease; but such fowls may have been exposed to disease at some time, and bring it on their feet or in some other manner. Pigeons which fly from farm to farm may also carry disease. It is therefore incumbent upon the farmer to be careful from whom he procures "new blood" to be added to the flock at this season of the year, for it is difficult to detect disease without a close examination, which is something that is seldom done by those who procure fowls from elsewhere to add to the flock. Nor should the vigilance be confined to the individual birds; the entire flocks of which the birds are members should be carefully looked after, as disease in the flock of some neighbor may be carried to other places by apparently healthy birds taken from such flock. Roup is often present in an incipient stage in a flock, and makes its appearance under the first favorable circumstances. Farmers should never buy a hen from another flock without careful inspection if it can be avoided. By being careful in this respect much labor and difficulty will be avoided.

### Inquiries Answered

STAGGERS.—E. M., East Jordan, Mich., states that "her fowls stagger and seem unable to stand." They are probably very fat. Reduce the food, and separate the males and females.



A KANSAS FLOCK OF WHITE TURKEYS

give them all they will eat of anything you may prefer, only you should provide a variety. As foods vary, it is difficult to estimate the required quantity, especially when the food consists of grain, bone, meat, potatoes, clover, etc. Some hens like one thing, and some another. Weigh the food, let the hens eat, then weigh the remainder, and you will know more about how much to feed than can be explained, as flocks, breeds and individuals differ greatly in their requirements.

### Selling Poultry and Eggs

It is frequently the case that the best markets are the nearest. Farmers west of the Ohio River need not send their poultry to the Atlantic cities. It is true that they may receive a few cents more a pound, but the costs and commissions will be large. Those who ship to the East are parties who buy large lots and ship in car-load lots. Never ship to a distance if you can find a market nearer to you. If there is no market near by, then try to make one. This can be done by endeavoring to raise better poultry than the market contains. Quality will sell an article in any market. Do not

BONE FOR POULTRY.—J. H. A., Brodhead, Ky., asks "if cooked bone and hotel-slop are suitable for poultry." The bone in any form, if pounded, will prove excellent, while the fresh slop will also be acceptable, as the fowls will select only portions that they will relish.

ROUP.—F. A. H., New Freedom, Pa., requests "a remedy for roup, and asks if there is danger in handling affected birds." Roup is a contagious disease which appears in many forms. It may not be dangerous to handle the birds, but unless they are very valuable the labor and time required will be worth more than the value of the birds. There is no sure cure for the malignant form. The best thing to do is to destroy the flock if the birds are not pure breeds.

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## Live Stock and Dairy

### Crimson Clover

**H**ORSES sometimes die from eating crimson clover through the formation of balls in the intestines, caused by thousands of small hairs which occur in the heads of crimson clover, and which will not pass through the animal. This comes from the feeding of what may be termed over-ripe crimson clover, and the difficulty can be obviated by cutting the crop earlier. The hairs of this clover do not become stiff until the plant has entirely passed the flowering stage and the seed has begun to ripen. The feeding of crimson-clover straw which has been threshed for seed is therefore dangerous, also.

This crop has a great advantage over many other forage crops, in that it gets a good growth in the fall, and acts as a cover-crop, preventing washing, while it starts off with quick growth in the early spring, and furnishes a succulent and highly relished and nutritious feed when rye is about the only other green crop, while if wanted for green manuring, it comes to a full stand in time for ordinary plowing and planting. Grown on corn-land, crimson clover seems to dovetail in exactly. It can be sown in the corn-field in August, will make a good growth during the fall after the corn is cut, and be a solid mass of wealth to turn under for the following corn crop in May. G. E. M.

### Milk-Fever

Parturient apoplexy—better known to cattle-breeders by the name of milk-fever, or dropping after calving—has been the subject of much discussion in the veterinary press of recent months. Mr. R. J. Sankey, South Hill, Ashford, Kent, now writes to say that if owners of dairy stock will follow the natural order of things a little more closely, neither they nor their cows would suffer much from milk-fever. The best plan is to leave the calf with its mother for the first three days, and not to touch her unless she is a very heavy milker, in which case take only small quantities of milk from her beyond what the calf sucks at small intervals. If the owner objects to the two being together, but prefers to remove the calf at birth, then let him make quite certain that the milk is drawn from the cow a little at a time, and often, just as the offspring does in a state of nature. If the udder is never emptied until the calf is at least three days old, there is but little or no risk of dropping after calving. The foregoing was told Mr. Sankey many years ago by a large dairy-farmer in Leicestershire, who assured him he had not lost a single cow since adopting that system, although he had previously lost several every year, and Mr. Sankey's own experience is similar. —Scottish Farmer.

### What Ailed the Cow

The old cow was sick, and we did not feel competent to treat her, so we sent for an old man of the neighborhood who had a reputation for that sort of business. He came, and wisely looked the cow over, felt of her horns and her ears, and pronounced it a case of "holler horn."

"Holler horn?" I asked. "What in the world is that? I supposed all cows' horns were more or less hollow."

The old man looked at me with some scorn in his face, as if he felt sorry for a man with such hopeless ignorance as I manifested, and when pressed for an answer brought down to the level of my comprehension, enlightened me thus: "Why, holler horn is—just holler horn."

Then the honest old man, in the endeavor to serve me the best he could in the light of the days when he learned the art of "cow-doctorin'," told me how the trouble must be treated. "We've got to bore a hole inter her horns, an' pour in some stuff."

Preparations were accordingly made for this operation, but somehow it seemed to me that there was something so inconsistent about the performance that I finally said, "I guess we will wait a while and see how she progresses, and with your permission I will see what the books say about this disease."

That was in the early days of our farm life. I have had a good many sick cows since then, but never one with "holler horn." When they have symptoms such as that first old cow had, we now diagnose the difficulty as indigestion, and instead of boring into the horn with a gimlet, and injecting vinegar, pepper, salt and water, we treat by nourishing food and relaxing medicines to get the bowels to resume their natural functions.

Some other old-time diseases of cattle were treated by slicing a piece off the lower end of the animal's tail, or blow-

ing camphor-gum and alcohol into its ears. One half the dose was blown into one ear, and when the creature had stopped shaking her head and snorting, the other half was blown into the other. But those days are fast disappearing. We have learned something about the anatomy of the cow, the same as we have of the makeup of a man. We laugh now when any one speaks of hollow horn, but it is not so very long ago that we treated our children in ways no more civilized.

But after all that has been learned on this subject, the truth remains that a great many times the best thing we can do for a cow that is sick is to do nothing. Nature will do wonders if she is given a chance. E. L. VINCENT.

### Beef in the East

There are many Eastern farmers who claim to have made a study of agricultural conditions in this country ready to prove that the Western farmer and stock-grower has been built up at the expense of his Eastern brother; that various governmental and corporate influences have assisted the agricultural star of empire to westward take its way. However this may be in fact, wheat-growing in the Northwest, and comparatively low transportation rates to Eastern markets and seaboard, have made the old slipshod wheat-growing of the East unprofitable. Similar results were worked in the cattle business from the big ranches of the West and Southwest, so that the Eastern feeder who is now bold enough to keep in the business takes the chances of coming out at the end of his year with little more than the manure. The cattle kings made the cattle, and the packers, with their ramifications reaching every center in the country, made the markets. But the cattle king is being deposed. The home-seeker and home-builder has invaded his territory, and he no longer herds his droves on land reaching from sunrise to sunset.

I have seen the statement somewhere that the average ranch-grazing acreage to the steer is seventeen, and it has taken a bewildering number of acres at that rate to pasture the great numbers of cattle that have for recent years held the balance of power in making prices.

Men or companies of men with combinations of capital, grazing from one thousand to one hundred and fifty thousand cattle, could easily afford to do it for from one to three dollars a head net profit, while the farmer, with his little herds of ten, thirty, fifty or a hundred, grazing and feeding on his land in connection with crop-growing, could not compete.

The viewpoint of the big rancher has been changed, and it looks much as if the making of beef from birth to butcher is gradually going to settle back to the farms. When this time comes in its fullness, steer-feeding on the Eastern farm is going to lose its present element of doubt and financial risk.

In England, where they do not have our great advantage of cheap feed growing in the corn crop, and to where great quantities of our commercial feeds are exported, breeders and feeders of good cattle find satisfactory profits. We may not be eating any more beef per capita than formerly—I imagine not quite as much—but the population increases, and without indulging in prophesy, it looks as if the beef market in the immediate future is going to be regulated by supply and demand much more than in the past.

This, then, will mark the opportunity for the Eastern farmer. The best and largest markets are in the East. Farm-land in the East is now about as low in price as good farm-land in any section. The Eastern farmer can grow corn, cow-peas, clover and alfalfa abundantly, and by the use of the silo can fatten steers probably as cheaply as the feeder in the "corn belt."

This Eastern farmer also finds it profitable to buy commercial fertilizers to supplement his home-made ones, and the more he has of the latter, the smaller his purchase of the former; and as he always takes account of the amount of manure his farm produces, as soon as steer-feeding will show him somewhat more than market prices for his grain and fodders, with a largely increased manure-pile, we will find an active revival of steer-feeding in the East. W. F. McSPARRAN.

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## Live Stock and Dairy

### Imported French Stallions

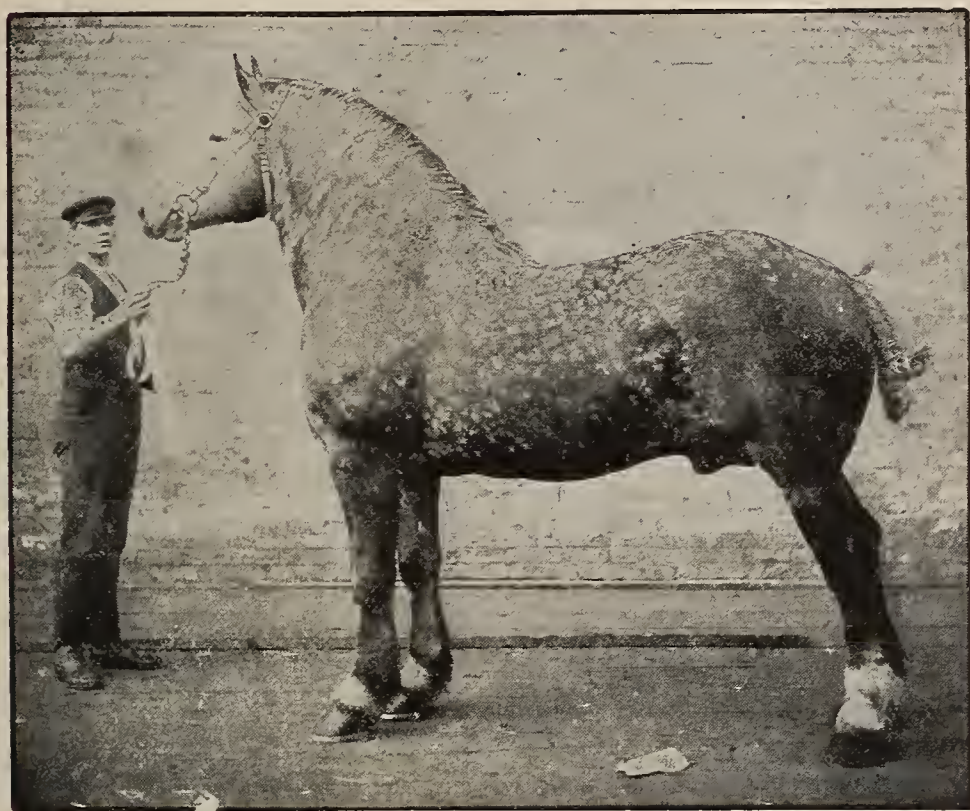
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blood in the breed, but it was such blood as tells in the charge of good breeders.

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IMPORTED PERCHERON STALLION, BERENICE

shall have passed the inspection and received the approval of the government experts. Deteriorating outcrosses are thus prevented, and no stallions of individual merit not up to the high standard set are used. The government of France maintains studs, the use of which is at the command of the most obscure owner of a mare at a very nominal fee, so that the whole system of French horse-production is based on well-guarded, defined and high scientific principles.

As an evidence of the great popularity of the Percheron in this country, it may be noted that at present there are about ten times as many French Percherons

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The Percheron is the Imported Stallion Berenice 34109. He was foaled in 1897, is seventeen hands high, and weighs two thousand pounds. He was winner of first prize in collection at the great Annual Show of France and at the "Societe Hippique Percheronne," the two largest shows in France, in 1903; winner of first prize at



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because it gets more cream. More butter. Greater profits. Easier to clean and operate. No waste. Durable. Anti-rust throughout. Results guaranteed. Catalog free. Write today. We want good agents.

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### DEATH TO HEAVES! NEWTON'S

GUARANTEED Heave, Cough, Distemper and Indigestion Cure will effect a permanent cure for the ailments named. Recommended by veterinarians and owners. Every druggist in America has it or can get it. Send for Booklet. \$1.00 per can, at dealers, or by mail or express prepaid.

THE NEWTON REMEDY CO., TOLEDO, OHIO.



### CORRUGATED CREAM EXTRACTOR. IMPROVED

Inner can detachable, double the cream gathering power of any other, no water in the milk, more cream, more and better butter, pure milk for table and stock, easily cleaned, greatest labor saver ever used on a farm. Free catalogue. Price the lowest. Agents wanted.

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25 designs, all steel. Handsome, durable. Cheaper than a wood fence. Special inducements to church and cemeteries. Catalogue free. KOKOMO FENCE MACHINE CO., 427 North St., Kokomo, Indiana.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and other sore eyes, BERRY CO., Iowa City, Ia., have a sure cure.



## Our Best Advertisement

is a satisfied customer. If any neighbor or acquaintance of yours has had business dealings with us, has ever purchased a Split Hickory Vehicle or Harness, ask him if we did not fulfill every part of our agreement, and furnish him with a perfect end high grade vehicle at a very moderate and satisfactory price. **WE WANT YOU** to be our "advertisement" in your neighborhood. We want your neighbors to acknowledge that your huggy is the best, handsomest, most comfortable and the best bargain for the price they ever saw. They end you will agree on this fact when you receive a 1904

## Split Hickory \$50 Special TOP BUGGY



136 Page Catalogue FREE

The highest type of huggy possible to be built for the price and everyone accompanied by our 2 Year Absolute Guarantee. When the huggy arrives you are permitted to use it before you decide to keep it. We allow you

## 30 Days Free Trial

If it proves all you expect, you will wish to keep it. If it disappoints you in any particular, send it back to us at our expense and it shall cost you nothing. Read the following partial description of the 1904 SPLIT HICKORY SPECIAL: Wheels—Seven patent, 38 and 42 inches high or higher if wanted. Tire 1/4 inch by 1/4 inch thick, round edge. Axles—Long distance, dust proof, with cemented axle beds. Springs—Oil tempered, graded and graduated, 3 and 4 leaf. Wooden spring bar furnished regularly. Bailey loop if preferred. Upholstering—Finest quality 16 oz. imported all wool broadcloth cushion and back. Spring cushion and solid panel spring back. Top—Genuine No. 1 enameled leather quarters with heavy waterproof rubber roof and back curtain, lined and reinforced. Paintings—Wheels, gear wood, body and all wood work carried 100 days in pure oil and lead. 16 coats of paint with the very highest grade of finishing varnish. Gear painted any color desired. Body plain black, with or without any striping.

This buggy is furnished complete with good, high padded patent leather dash, fine quality, full length carpet, side curtains, storm apron, quick shifting shift couplings, full leathered shafts with 36 inch point leathers, special heel braces and corner braces.

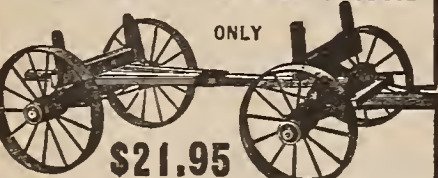
Send for our FREE 136-page Catalogue of Split Hickory Vehicles and Harness.

NOTE—We manufacture a full line of high grade Harness, sold direct to the user at wholesale prices.

The Ohio Carriage Mfg. Co.  
(H. C. PHELPS, President),  
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## Farmers' Handy Wagon

With 4-Inch Tire Steel Wheels



ONLY

\$21.95

Low and handy. Saves labor. Wide tires, avoid cutting farm into ruts. Will hold up any two-horse load. We also furnish Steel Wheels to fit any axle. Any size wheel, any width of tire. Catalogue free. EMPIRE MANUFACTURING CO., Box 1094, Quincy, Ill.

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10 Days Trial Send us your name and address tonight and we will send you free

Our "Farm Hand" Sickle and Tool Grinder

Combines Automatic Sickle Grinder, Tool Grinder, Saw Gummer and Polishing Machine. Both Emery and Corundum Wheels, 4,000 revolutions a minute. In fact its \$41.00 of Machinery for \$8.45. Use it ten days. Then either return at our expense or send us our special price \$8.45. Write now. Agents Wanted.

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12 PKts SEEDS THE BEST 20c  
Beet, Egyptian; Cabbage, Greenhead; Carrot, Danvers; Corn, Early Evergreen; Cucumber, Russian; Lettuce, Early Curled; Musk Melon, Paul Ross; Water Melon, Sweetheart; Onion, Prize Taker; Radish, Scarlet Turnip; Squash, Marrow; Tomato, Beauty. One packet each for 20 cts. coin or stamps. FREE with order, packet of ESSEX RAPE. Mention paper. W. W. BARNARD & CO., 161 KINZIE ST., CHICAGO

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of the BEST QUALITY and the PUREST form can be secured from a given quantity of apples by the use of the

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The only press awarded medal and diploma at World's Fair. Get our free illustrated catalogue before buying. HYDRAULIC PRESS MFG. CO., 6 Main St., Mt. Gillett, Ohio.

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Does all kinds of Light and Heavy Stitching  
Will save the price of a new machine. A Perfect Hand Sewing Machine and Riveter combined. To Show It Means a Sale. Agents make from \$6 to \$15 a day. One agent made \$50 first day and writes to hurry more machines to him. Write for terms to agents.  
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## FREE-GOLD WATCH!

An American movement watch, fully warranted to keep correct time, in solid Gold Plated case, equal in appearance to a Gold Filled Watch warranted 20 years, is given FREE to Boys and Girls or anyone for selling 20 pieces of our handsome jewelry at 10 cents each. Send us your address and we will send the jewelry postpaid, when sold send the \$2 and we will positively send you the watch and a chain. BOND JEWELRY CO., Dept. 26, CHICAGO.

## The Grange

By MRS. MARY E. LEE

### Running the Gauntlet

WHEN a man is a candidate for an important office he is the target for abuse. His past is raked up, and if no vulnerable point is found in his armor, one is manufactured. If he has been successful as the world counts success, he is accused of using questionable methods to secure his wealth. Popular prejudices are appealed to, popular weaknesses are pandered to. The candidate's character is so blackened that one wonders if any citizen with proper civic pride would cast his vote for him. It is fruitless to recount the methods, attacks and arguments. They are patent to every intelligent man and woman. If the statements are true, they should be known and carry weight. If they are not true, then they are lies pure and simple. It is right that the character of the candidate asking the suffrage of the people should be closely scrutinized. It is but just to him and the public that the truth alone be told. The great majority of the people are interested in efficiency of service, rather than the personal advancement of a candidate or clique, and every means should be offered them to make a wise selection. Vicious attacks upon the character of a candidate, unless founded on facts, puts a premium on dishonesty, and creates and fosters distrust in the public mind. It is one of the greatest bars to independence of action. So long as it remains unchecked the personnel of public service will not be greatly elevated.

Let the people demand that the truth only be told of a candidate. Let it stamp its disapproval on any statement that is not founded on facts. Better service will result, class feeling and prejudice will be allayed, and a higher respect for honor and truth will ensue. The remedy lies with the people.

### National Educational Association

#### DECLARATION

1. The United States Bureau of Education has amply proved its usefulness to the nation. Its publications are standard works of reference for school officers and teachers everywhere. The Bureau of Education should be made an independent administrative department, such as were the Departments of Agriculture and of Labor previous to their elevation to Cabinet rank. Sufficient appropriations should be made by the Congress to enable the Commissioner of Education to extend the scope and add to the usefulness of his work.

2. The condition of affairs in the Indian Territory, where fully three fourths of the population are reported as being without schools for their children, demands the immediate attention of the Congress. Provision should be speedily made by which the people of the Indian Territory will have power to establish and carry on a system of public schools so that all classes of citizens in the Indian Territory may have the educational opportunities which are enjoyed by their fellow-citizens in other parts of the country.

3. Teaching in the public schools will not be a suitably attractive and permanent career, nor will it command as much of the ability of the country as it should, until the teachers are properly compensated and are assured of an undisturbed tenure during efficiency and good behavior. A large part of the teacher's reward must always be the pleasure in the character and quality of the work done; but the money compensation of the teacher should be sufficient to maintain an appropriate standard of living. Legislative measures to give support to these principles deserve the approval of the press and the people.

4. The true source of the strength of any system of public education lies in the regard of the people whom it immediately serves, and in their willingness to make sacrifices for it. For this reason a large share of the cost of maintaining public schools should be borne by a local tax levied by the county or by the town in which the schools are. State aid is to be regarded as supplementary to, and not as a substitute for, local taxation for school purposes. In many parts of the United States a large increase in the amount of the local tax now voted for school purposes, or the levying of such a tax where none now exists, is a pressing need if there are to be better schools and better teachers.

5. The highest ethical standards of conduct and of speech should be insisted upon among teachers. It is not becoming that commercialism or self-seeking should shape their actions, or that intemperance should mark their utterances. A

code of professional conduct clearly understood and rigorously enforced by public opinion is being slowly developed, and will doubtless one day control all teachers worthy of the name.

6. It is important that school-buildings and school-grounds should be planned and decorated so as to serve as effective agencies for educating not only the children, but the people as a whole, in matters of taste. The school is becoming more and more a community center, and its larger opportunities impose new obligations. School buildings should be attractive as well as healthful, and the adjoining grounds should be laid out and planned with appropriateness and beauty.

7. Disregard for law and for its established modes of procedure is as serious a danger as can menace a democracy. The restraint of passion by respect for law is a distinguishing mark of civilized beings. To throw off that restraint, whether by appeals to brutal instincts or by specious pleas for a law of nature which is superior to the laws of man, is to revert to barbarism. It is the duty of the schools so to lay the foundations of character in the young that they will grow up with a reverence for the majesty of the law. Any system of school discipline which disregards this obligation is harmful to the child and dangerous to the state. A democracy which would endure must be as law-abiding as it is liberty-loving.

NICHOLAS MURRAY BUTLER, of New York, Chairman.

ANDREW S. DRAPER, of Illinois, JAMES M. GREEN, of New Jersey, BETTIE A. DUTTON, of Ohio, H. B. FRISSELL, of Virginia, Committee on Resolutions.

### Then and Now

In 1896 the late Senator Hanna sprang into international prominence as a campaign manager. His enemies, whether in or out of his party, could find no words black enough to portray his character. Every dastardly deed conceivable in politics was attributed to him. His villainies were limited only by his capacities. Cartoonists pictured him as the \$ mark. Pulpit and press anathematized him, and in clubs and lyceums he was painted in the darkest colors. When he became senator the attacks were renewed, and were pursued until a few weeks ago. Then came a sudden change. He was the greatest man of the century, the citizen, patriot, friend of labor, defender of capital, conservator of harmony and prosperity. Pulpit and press extolled his worth and urged young men to emulate his example. He typified the American ideal. They gathered in solemn conclaves and recounted his virtues. The English language was all too poor to attest his merit. He was possessed of the most exalted and sublime traits. His merciful goodness was limited only by his capacity. And this marvelous change of expression came in the twinkling of an eye, in the instant when he drew his last breath and entered into eternity.

It is not my purpose to speak of the character thus anathematized and glorified. Time will accord him his just place in the history of our country. It is the spirit displayed—the careless regard for truth—that is to be condemned.

### Grange Spirit

The unprecedented revival in grange spirit is most gratifying. In the more intelligent communities it needs only that the aims and the past history of the grange be pointed out to secure hearty response. Farmers realize the need of organization, know that they cannot afford to act individually on any public question, and they are glad of an opportunity to unite with an organization national in its character. Prejudices are dying out, and men are asking that the grange be brought to them. Farmers are a conservative but progressive people, and will not countenance radical changes. Their contact with Nature shows them the unalterable relation of cause and effect. The grange is conservative yet progressive. It asks no unjust advantages. It seeks not class legislation, but simply an equal opportunity in the economic arena.

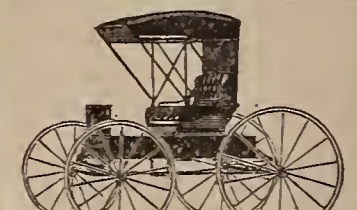
The time is ripe for persistent, aggressive work. It is to the interest of each local grange to extend its influence in its own locality and foster the growth of a grange sentiment in other communities. Farmers are eager for grange gospel, eager to contribute their power to the advancement of agriculture. They respond heartily as soon as the matter is presented. The grange was never before so strong, nor had a more alluring prospect of success.

## OUR 31 YEARS'

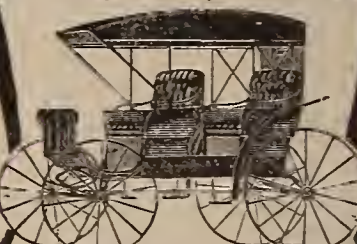
EXPERIENCE and continued success is a guarantee to you of good quality and fair dealing. **WE HAVE NO AGENTS** anywhere but sell direct to you, thus saving you the agent's and dealer's profit. We are the largest manufacturers of vehicles and harness in the world selling on this plan exclusively. We ship for examination guaranteeing safe delivery. You are out nothing if not satisfied. Our large illustrated catalogue is free. Send for it.



No. 722—Bike Wagon. Has Spindly Seat with leather armrests. 1 1/2 inch Kelly Cushion Tires. Price complete \$57.50. As good as sells for \$75 more.

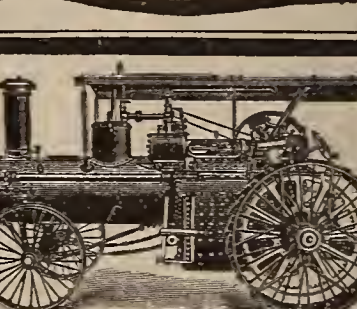


No. 644—Up-to-date Top Buggy, with 3-inch Kelly Rubber Tires. Price complete \$34.50. As good as sells for \$75 more.



No. 334—Extension Top Surrey. Price complete \$50. As good as sells for \$75 more.

Elkhart Carriage & Harness Mfg. Co., Elkhart, Ind.



## Rumely Engines

both as to traction and generating and supplying power, are typical of all that is best for thrashermen. They are rear geared, gears are of steel, cross heads and slides are protected from dust, they are free from trappy devices. Single or double cylinders, burn wood or coal, or direct fuel for hatching straw. Fit companions in the threshing field for the famous New Rumely Separator. Free catalogue describes full details. Write for it. M. RUMELY CO., LA PORTE, IND.



## Perfect Balance

AVERY CULTIVATORS  
all have the famous Avery double-acting lifting springs, rod fenders, soft center steel shovels, etc.

## The Vacuna

a perfect combined Riding and Walking Cultivator, 8,500 sold in 1902.

Special Points: Wide Tires, Patented Balancing Feature, Level Swing, Easy Handling. Every farmer should know of the Great Avery Line of Wagons, Planters, Engines, Thrashers, etc. Write for free catalogue H. AVERY MFG. CO., 832 Iowa Street, Peoria, Ill.



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CLARK'S REV. Bush Plow and Harrow

Cuts a track 5 feet wide, 1 foot deep. Connects subsoil water. Can plow a new, cut forest, slump, bush or bog land.

CLARK'S DBL. ACTION CUTAWAY Moves 18,000 Tons of Earth in a Day  
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does away entirely with all starting and running batteries, their annoyance and expense. No belt—no switch—no batteries. Can be attached to any engine now using batteries. Fully guaranteed; write for descriptive catalog. MOTTINGER DEVICE MFG. CO., 24 Main Street, Pendleton, Indiana



The DeLoach Patent Variable Friction Feed Saw Mill with 4 h. p. cuts 2000 feet per day. All sizes. Shingle Mills, Planers, Trimmers, Corn and Burr Mills, Water Wheels, Latb Mills, etc. Fine catalogue free. DE LOACH MILL MFG. CO., Box 300, ATLANTA, GA.

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best by Test—78 YEARS. We PAY CASH WANT MORE SALESMEN Weekly STARK NURSERY, Louisville, Mo. Danville, N. Y.



# Special Sale of Farm Supplies!!

SOME GENUINE BARGAINS IN FIRST CLASS MATERIAL, MERCHANDISE AND MACHINERY AT SACRIFICE PRICES

The Chicago House Wrecking Company is the largest institution of its kind on earth. We are constantly purchasing complete stocks at Sheriff's and Receivers' sales. We have purchased and dismantled all of the exposition of modern days, including the World's Fair. Here are a few samples of our ability to give special prices on farm necessities, which would cost from 25 to 50 per cent. more elsewhere.

## Kitchen Sink \$1.25

Porcelain Enameled, Inside and outside. 10,000 of these new sinks, 18x30 in., bine enameled, @ \$1.25. Cast iron, white porcelain enameled, 18x30, @ \$1.50. Larger sizes, write for prices.

## Pipe

1 in. with couplings, 3 1/2¢ per ft. 1 1/2 in. 4 1/2¢  
First class wrought iron pipe for water and other purposes. Re-threaded and in good condition. Also well casing, boiler tubes and pumps.

## Farm Forges \$6.35 each

We bought several carloads of new Portable Forges at low price. HORSESHOES, per keg, \$3.00. Horse-shoe Nails, per lb., 8¢. Post Drills, \$4.85. Blacksmiths' Tools of every kind. MIXED BOLTS—a handy assortment—per lb., 3¢.

## WIRE, \$1.40 per 100 lbs.

Smooth galvanized wire, 100 lbs. to bale; gauges, 11 to 14 inclusive; lengths, up to 250 ft.—per 100 lbs., \$1.40. Smooth Painted Wire Shorts, gauges 12, 13 and 14, \$1.10, per 100 lb. bale. Barbed wire, 100 lbs., \$2.35.

## POULTRY NETTING

150 lineal ft. to bale; 12 in. wide, 50¢ other widths in proportion.

## Furniture from Weddell House

Cleveland, Ohio  
We bought the furniture and fittings complete of this well known hotel. It is of highest quality and sold at such low prices as to be within reach of all. We have a complete catalogue containing list of this and other material from high class Clubs, Hotels, etc.; purchased by us.

SEND FOR CATALOGUE No. 34, containing some 200 pages of material easily 25 to 50 per cent. less than you can purchase elsewhere.

## New Steel Roofing and Siding

Complete with nails and painted red on both sides at  
**\$2.00 per 100 Square Feet**

Most durable and economical roof covering made for houses, stores, barns, sheds, cribs, poultry houses, etc., and a hundred other purposes for inside and outside use; cheaper and will last longer than any other covering. Sheets are 6 and 8 feet long.

## WE PAY THE FREIGHT

to all points east of Colorado. This roofing at \$2.00 per square is our No. 10 grade, semi-hardened. Very easy to lay; requires no experience; hatchet or hammer the only tool needed. Comes in Flat, Corrugated, V Crimped.

Brick Siding and Beaded Ceiling or Siding. Prices on application.

## Jack Screws 80¢

Brand new cast, iron stand with wrought iron screws, deep cut threads: 1 1/2 in. diam., 12 ton each, 80¢. 1 1/2 in. diam., 18 ton each, \$1.10. 2 in. diam., 20 ton each, \$1.15. 2 1/2 in. diam., 24 ton each, \$1.85. 2 1/2 in. diam., 28 ton each, \$2.40. Also, Lever Jacks for \$5.00.

## Steel Fence Posts, 30¢

Absolutely indestructible. A permanent fence post suitable for fields, farms, pastures, etc. Made of one piece hollow tube. Price each, complete with staples, 30¢. Special discounts on large quantities.

## ONE-PIECE GRAPE POSTS, the best on the market.

Get our post circular.

## A Carpet Bargain

Thoroughly renovated carpets which we are selling at way-down price. Can furnish you a high grade Wilton or Axminster, good as new, at 60¢ pr yd. Write for complete list.

## Felt Roofing

VULCANITE, MINERAL WOOL FELT: 2-ply "EAGLE" brand roofing, 1.15 3-ply "EAGLE" brand roofing, 1.35 Prices include nails and necessary cement. The "VULCANITE" that we are offering is the best grade of felt covering on the market. Requires no coating after it is laid. Extensively used on sheds, barns, etc. Samples furnished.

## Wire Nails & Staples

A handy assortment of wire nails, put up in kegs of 100 lbs. ranging from 3 to 30d, all kinds. Single keg lots, each, \$1.60 Five keg lots, 1.50

## Wire Staples, one size in a keg: 1/2, 3/4, 1, 1 1/2, 2 and 2 1/2 in.

Round heads . . . \$2.25 per 100 lbs. Square heads . . . 2.00 " " "

## Doors, each \$1

Like cut. Our catalogue contains list of Lumber, Sash, Doors, Windows and Building Material of every kind. We can estimate on your mill work and all requirements. Also a bath room outfit complete consisting of closet, bath tub and wash stand, for \$37.50.

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Good Manila Rope, slightly used, all sizes, 3/16 to 2 in., 7¢ lb. Newsal rope, shop worn, sizes, 1/2 to 1 in., 8¢ lb. Twine, all kinds, 6¢ lb. Wire Rope, all sizes, low prices. Tackle Blocks, Rope Pulleys, etc.

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Our high grade "Premier" brand, guaranteed 3 years, per gal., 95¢. "Perfection" brand for ordinary use, per gal., 65¢. Barn paint in barrel lots, per gal., 30¢. Cold Water Paints, per lb., 6¢. Write for color card, mailed free.

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Two-Horse Power, \$60 Absolutely new and perfect. Same Engine with Pumping Jack, \$65 Engines ranging from 1 to 1,000 horse power; saw mills, boilers, pumping machinery and equipment of every kind. Ask for "Machinery News"

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Single bitted axe, cast iron, 30¢  
D'ble bitted (ditto) 40¢  
Good padlocks, 6¢  
Wire clothes lines 10¢  
All-steel hatchets 30¢  
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All-steel hammers, 30¢  
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High grade, perfect cutting. All ball bearing frame, as follows, each complete: Small stone, \$2.25; medium, \$2.45; large, \$2.65. Also, Ball bearing Emery Grinder complete with 2 emery wheels and all fixtures. Price \$6.50.

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Why pay your dealer from \$5 to \$40 more for a stove or range, when you can buy direct from our factory

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Kalamazoo Steel Range, saving all dealers' and middlemen's profits? We save you from 25% to 40% on every purchase and you run no risk for we give you

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We fit all our ranges and cook stoves with our patent oven thermometer which makes baking easy.

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**\$16.40**

Imitation leather trimmed; Carpet, wrench and shafts—just as illustrated. Our Vehicle Catalogue 250 gives complete particulars. Send for it before you order. Other Road Wagons \$21.50 and \$23.90.

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"Climax" Surrey.



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**\$42.95** LADIES PHAETON LATEST 1904 STYLES

**\$15.75**

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Send us a postal for our Big FREE 1904 Buggy and Harness Catalog, fully describing all these vehicles, and our full line 1904 styles; also our Great Free Book explaining how Co-operation reduces the price of every thing. Don't buy a Buggy or Harness until you get our great Free Illustrated Books. Best value ever for our latest 1904 style ladies phaeton, as described in our Big Free Buggy Catalogue. A great offer by a reliable house.

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to church or anywhere on business or pleasure, the next thing to a Kalamazoo Surrey is this

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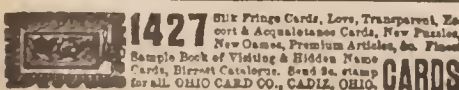
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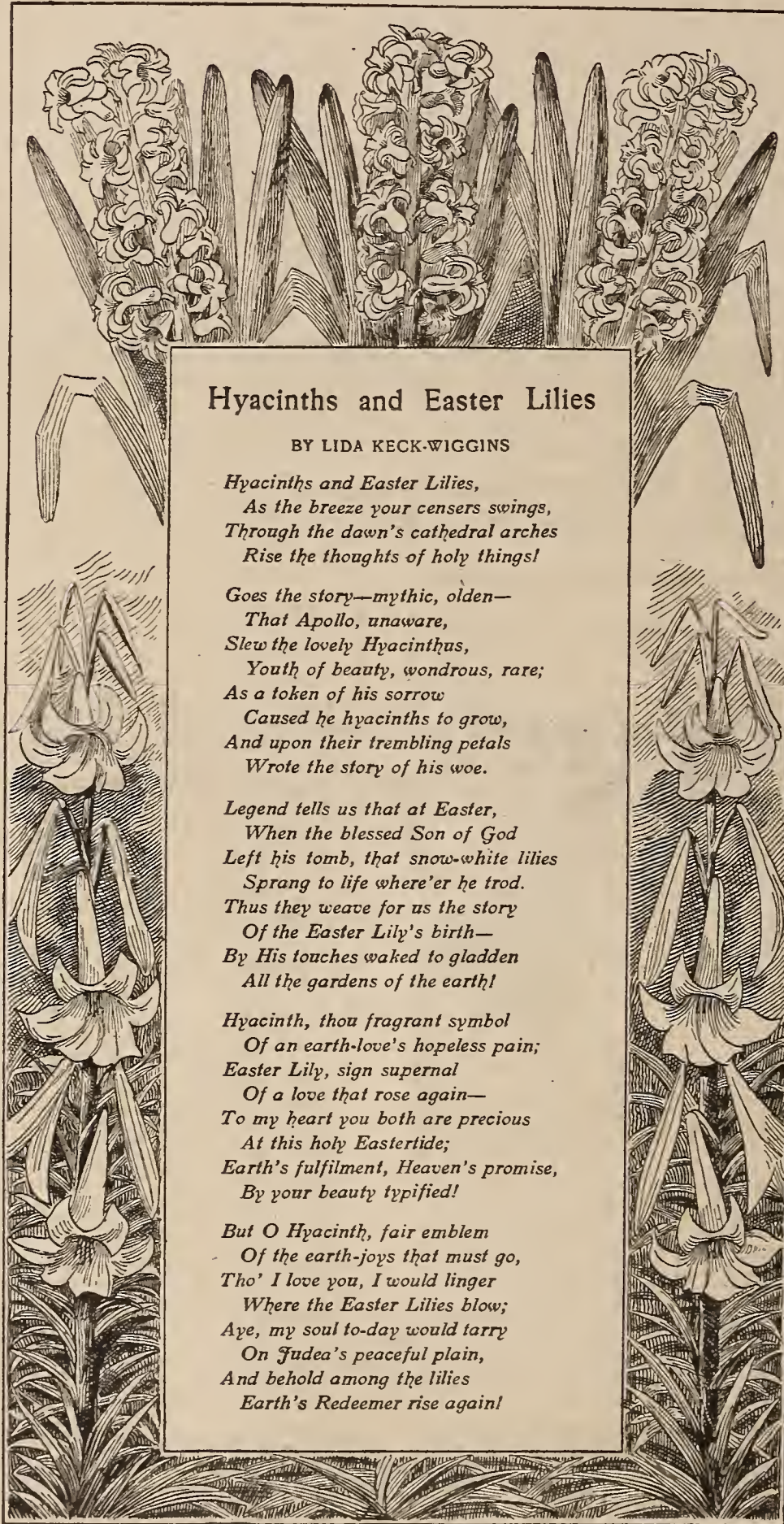
## Around the Fireside

### Do a Little, Work Well

A GENTLEMAN who is seeking employment and assistance writes a letter which it is truly a cross and a burden to read. It is scratched and scrawled and scribbled; it is hurried and slovenly and jumbled; the lines ascend and descend, and its whole aspect is that of carelessness, haste and disorder. And yet this is not through ignorance or inexperience, for the writer is a graduate "with honors" of one of the most noted

### Lily-of-the-Valley

This flower increases rapidly, and becomes a mass of plants when allowed to remain long in one place. When the plants crowd each other, dig up the clumps, separate them, and reset, placing them six inches apart. For a dense shade this is one of the best plants we have. Here it grows and blooms freely, making beautiful the ground that might otherwise be barren and unsightly. —Woman's Magazine.



### Hyacinths and Easter Lilies

BY LIDA KECK-WIGGINS

*Hyacinths and Easter Lilies,  
As the breeze your censers swings,  
Through the dawn's cathedral arches  
Rise the thoughts of holy things!*

*Goes the story—mythic, olden—  
That Apollo, unaware,  
Slew the lovely Hyacinthus,  
Youth of beauty, wondrous, rare;  
As a token of his sorrow  
Caused he hyacinths to grow,  
And upon their trembling petals  
Wrote the story of his woe.*

*Legend tells us that at Easter,  
When the blessed Son of God  
Left his tomb, that snow-white lilies  
Sprang to life where'er he trod.  
Thus they weave for us the story  
Of the Easter Lily's birth—  
By His touches waked to gladden  
All the gardens of the earth!*

*Hyacinth, thou fragrant symbol  
Of an earth-love's hopeless pain;  
Easter Lily, sign supernal  
Of a love that rose again—  
To my heart you both are precious  
At this holy Eastertide;  
Earth's fulfillment, Heaven's promise,  
By your beauty typified!*

*But O Hyacinth, fair emblem  
Of the earth-joys that must go,  
Tho' I love you, I would linger  
Where the Easter Lilies blow;  
Aye, my soul to-day would tarry  
On Judea's peaceful plain,  
And behold among the lilies  
Earth's Redeemer rise again!*

of English universities, and has been in respectable and responsible positions, is intelligent and doubtless conscientious. What, then, is the cause of such an abominable scrawl as this, which in itself would be well-nigh sufficient to bar one's way and cause any application made to be received with disfavor? It is probably simply through haste, and such haste as hinders the proper performance of work which is undertaken. Such haste is wasteful. It results in turning out half-finished and worthless work, and in causing careful men, at a great expense of time and labor, to go over work which, had it been properly done, they might have avoided to their great advantage. Is it any wonder that such men are unemployed?—Youth's Guardian Friend.

Our new Pattern Catalogue of all the brightest and smartest of the spring and summer styles is ready. A copy will be sent you for the asking.

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A prize of \$10.00 will be given the boy or girl under the age of eighteen who will send us before May 1st the best essay chronicling important events of United States history occurring during the lifetime of Mr. Raby. The length of the article may range from five hundred to two thousand words. Two \$5.00 prizes will also be awarded—one to the second-best essay and one to the third best.

The essay winning the first prize will be published in the June 1st issue of FARM AND FIRESIDE, the committee reserving the right to publish any of the others which may seem in its judgment worthy of publication.

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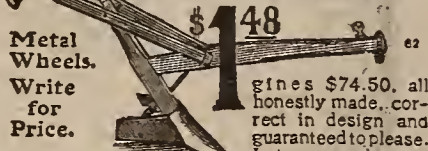


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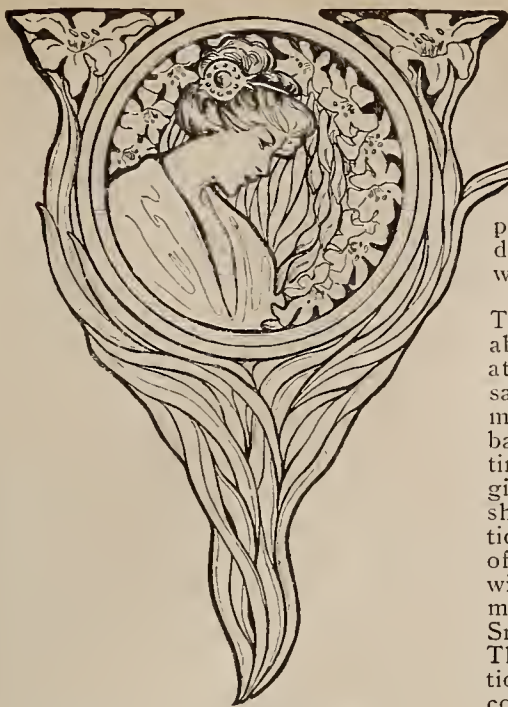
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## Around the Fireside



### Peary's Indefatigable Quest

**W**ARS may wage, dynasties fall, and new epochs dawn, but nothing will interrupt the plans of Peary to plant the American flag at the north pole. The explorer has lost a toe for every venture, but he is willing to go on stumps if he can realize his am-

pulse, full of original courage, and confident of final success. There is no such word as fail in his lexicon of exploration.

Lieutenant Peary talked to the Pine Tree State Club in Boston not long ago about his arrangements for another "go" at the pole. "My plan of campaign," he said, "will result, I hope, in the attainment of the north pole. That plan is based upon twelve years of almost continuous work and effort in the Arctic region. It contemplates first a powerful ship to my winter quarters; the utilization to the utmost extent of the services of Eskimos, whose members will go with me anywhere and do anything for me, and the use of the American or Smith Sound route to the north pole. This route may be divided into two portions—the navigable part, which may be covered by a ship starting from New York and going to Cape Sabine, to the northern shore of the American continent, a distance of some three hundred and fifty miles of ice-encumbered navigation, and a sledge journey from the northern end of Great Land straight across the central polar pack to the pole itself and back, making altogether four hundred and twenty nautical miles."

darkness of the winter, which lasts from October 1st to March 1st." Lieutenant Peary expects that the land campaign will occupy fifteen months. "The journey to the pole," said he, "will be started with three men and two sledges over the ice of the central polar basin. I shall give them their direction, and those men will go ahead. With their sharp eyes and their ice-craft they will pick their way through that chaos and make a trail at the rate of from ten to twelve miles a day. I shall follow with the main party, twenty-five of them, with a heavy load of sledges. With each ten miles of route traversed I shall send two men back, so that the last one hundred miles to the pole will be accomplished by four men, including myself." What he would find there, if he did not fail, the explorer frankly said he could not guess; open water probably not, but a land with a new flora and fauna, he felt sure. The expedition will cost two hundred thousand dollars; cheap at the price, says



A LITTLE EASTER "CHICKEN"

bition. Such dauntless persistence no other man has shown to learn the secret of the unknown land in the remotest north, defended by hitherto impassable barriers of ice. The way is strewn with the bones of victims, and leader after leader has given up the quest as the forlornest of hopes. But Peary, of the American navy, is undismayed by hardship and re-

The explorer went on to say that this time he wanted a heavy-proved steamer of one thousand to one thousand five hundred horse-power that could be used to break through the ice to a point further north by many miles than he had ever reached by ship before. There he would spend the winter. "It is not cold that hampers a man," he said; "it is the

Peary, if the pole is discovered, for it would enhance American prestige incalculably. He will start the coming summer. He may find his grave in the ice with his faithful Eskimos and other daring spirits; but immortal fame will be his if he returns with the secret won and precious information for the records of science.—New York Evening Sun.

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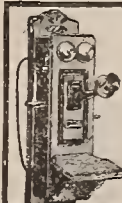
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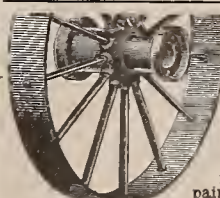


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#### Easter Cakes

IN THE "old country" a number of different cakes are especially provided for Easter. and although these are equally as pleasing for any other festival or occasion, custom has made them seem especially appropriate for this most sacred and blessed feast-day. For Good Friday and Easter Sunday breakfast, hot cross-buns are now almost as universally popular in America as in England, and in the large cities they are hawked about the streets on Good Friday in much the same fashion in both countries. These cakes did not always possess the Christian significance now attached to them, but are said to have been used as early as 1500 B.C. in the worship of idolaters, and were considered by the pagans a safeguard against disease and danger when used in their idolatrous rites.

In England, according to tradition, the early Christians invested these buns with much of the same sacred importance, and it is said that to this day in some of the more remote English counties a small loaf of bread marked with a cross is baked every Good Friday morning, and carefully preserved until the anniversary of the day returns. This is only made use of medicinally, and many grievous disorders are supposed to be cured by a small portion of this sacred loaf grated and made into a sort of panada with a little water. It would be considered sacrilegious to use it as food. The following recipes are excellent for this important article of Good Friday diet:

**HOT CROSS-BUNS.**—Mix half an ounce of yeast with a little warm milk, take two pounds of well-warmed flour, half a pound of butter and half a pound of sugar, and make the whole into a light dough with as much warm (not scalding) milk as is necessary, adding currants and spices to suit the taste. Set the dough to rise in a warm place for an hour or two, then form into nice-sized pieces for buns, and set on buttered tins. Cover with a piece of flannel, and set in a warm place to rise again for twenty minutes. When well risen, mark a cross on each with the back of a knife, brush over with sweetened milk, and bake in a hot oven.

**HOT CROSS-BUNS WITH BAKING-POWDER.**—To one quart of flour add one teaspoonful of salt, two tablespoonfuls of white sugar and one tablespoonful of baking-powder; sift all together, and then rub into the flour three ounces of butter; add sufficient milk to make a very soft dough, and roll out in a sheet an inch thick. Cut in square buns, and in the center of each top cut a deep cross with the back of a knife-blade. Bake in a quick oven.

The spices generally used in hot cross-buns are equal quantities of ground ginger, allspice, coriander and caraway seeds mixed together. Sometimes very thin chips of candied citron are placed in the marked cross before baking. A few other recipes for old-time Easter cakes are also given.

**EASTER CAKES.**—Take one pound of flour, one half pound of butter, one half pound of white sugar, the yolks of two eggs and the white of one, and cinnamon to taste; mix half the butter with the flour, sugar and spice; melt the remainder of the butter, and mix it with the well-beaten eggs, then mix all well together. Roll it out thin, cut into stars, circles and other fancy shapes, and bake in an oven which is not too hot. When cool, cover half of the cakes with white icing and the remainder with yellow. Sprinkle chopped almonds over the yellow-frosted ones, and ornament the white ones with tiny candy eggs in yellow and pale violet.

**EASTER RICE-CAKE.**—The weight of four eggs in ground rice, the same in sifted sugar, and in fresh butter beaten to a cream, the weight of two eggs in flour and the grated rind of half a lemon; mix the dry ingredients together, then add the butter and four eggs well

beaten, then the juice of half a lemon and one half teaspoonful of baking-soda. Line a cake-tin with buttered paper, put in the mixture, and bake immediately. The oven must be rather quick at first, but when the cake is risen it should be put back a little to finish more slowly. Cover the cake with white frosting, and if there are children to be catered to, place a

tiny candy rabbit in the center, and half way between this and the edge of the cake place little groups of tiny yellow, white and violet eggs. Around the edge of the cake place tiny stars of very thinly sliced candied citron.

**EASTER SEED-CAKE.**—One pound of butter beaten to a cream, one pound of sifted sugar, one pound of sifted flour (well warmed), eight eggs, the yolks and whites beaten separately, and caraway seeds to suit the taste; mix the ingredients, and beat all well together for a long time. (French cooks assert that an hour's beating is not too long, but unless the cook has a capable assistant this is not really necessary.) Line a cake-tin with buttered paper, put in the batter, and bake in a moderate oven. Whisk the whites of two eggs to a stiff froth, stir in lightly one cupful of powdered sugar and a little lemon extract. Color to a pale yellow with a little saffron-tea, and cover the sides and top of the cake smoothly with the icing. Simulate a nest in the center of the cake with very thin short strips of candied orange (they should be like straws), and inside of this place a chocolate hen and little yellow, white and violet candy eggs. Make a border around the edge of the cake with some more of the orange "straws" and very tiny eggs. Candy chickens, eggs, rabbits and every other emblem symbolical of Easter are on sale at all confectionery-shops in cities and large towns, and cost very little. It is well worth while to add these little decorations to the cakes, the small amount of trouble involved being not at all commensurate with the delight they afford small children. MARY FOSTER SNIDER.

#### A Quartet of Collars

A toilette can be made or marred by the finish at the neck. A pretty collar enhances the beauty of a handsome gown, and a handsome collar transforms a plain blouse, making it smart and dressy. The stocks illustrated are four handsome hand-made collars, and any gown would be enriched by the addition of such a lovely collar.

No. 1 is made of dainty cream-tinted chiffon, appliqué, fancy braid and fagoting. Three rows of ribbon are drawn through the foundation at the bottom in such a manner as to form a small "dip" in the center. This is finished with a shower-bow of the narrow satin ribbon. On these ribbons pearl beads are strung at intervals. A smart bow at the end of each depending ribbon gives a stylish air to the whole. The collar is finished at the back with a chiffon rose whose center is a cluster of pearls.

No. 2.—This collar is built of narrow white satin ribbons, six deep, fagoted together with silk floss. In the center a sort of "vest" or "V" is formed of the ribbons similarly treated. The side lengths are cut long enough to form a point, from which hangs a shower-bow. The ribbon-ends in this bow are small puffs of chiffon somewhat resembling rosebuds, with a bead at the base of each.

No. 3.—A third beautiful white stock is made by using a collar-form (these forms, made from chiffon and stiffened with whalebone, are for sale at most dry-goods stores) covered with mousseline de soie, upon which narrow white satin ribbon is crossed, as shown in illustra-



## The Housewife

tion. Upon this ribbon small steel beads are sewn, and the bow in front is a cluster of chiffon rosebuds and pearl beads.

No. 4.—The fourth illustration shows a tab collar cut from black Brussels net, studded with iridescent beads and dark blue "fish-scales." The edges are finished with cardinal velvet ribbon, and the fringes on the tab are formed of iridescent beads. M. NORTH.

#### Little Economies

Do you save all the fat from cooked meats for frying doughnuts, warming vegetables, etc.? It can be substituted for lard a great many times with good results, and is often preferable. Crumbs made after cutting bread, also pieces, may be used for dressing for fish or poultry, may be moistened for griddle-cakes or bread-pudding, or used in various other ways where bread or cracker crumbs are needed.

Baking-powder tins make good spice-boxes with labels pasted on the covers; the boxes may also be utilized for biscuit or cookie cutters. Butter-boxes are suitable for salt-boxes, and the large butter-firkins are very handy for vegetables or apples, or will do for washing or rinsing in place of a small tub. Strawberry-boxes and the wooden trays

in which lard and butter come from the store are the lightest kind of kindling, and you will be surprised to see how many will collect in a short time. Grape-baskets serve for holding the knives, forks and spoons used in cooking, and peach-baskets covered with cretonne or cambric make pretty waste-baskets for either the writing-desk or the sewing-machine.

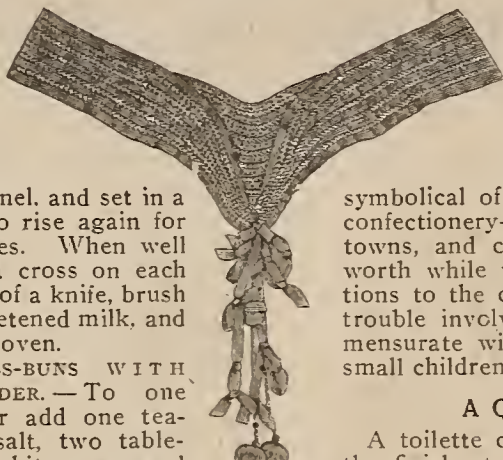
The skirts of worn-out wrappers are often in good condition, and can be made into kitchen-aprons. If well-fitting and of a desirable style, wrappers may be ripped apart and serve for patterns for a new garment. Shirt-waists and skirts which have always suited the wearer may be used in the same way, and will often



No. 1



No. 4



No. 2



No. 3



HANDKERCHIEF BAG

be more satisfactory than new patterns if one is obliged to be her own dress-maker. The careless use of aprons for taking hot dishes from the stove spoils them more than actual wear. Holders are easily made, and if hung near the stove are always ready.

The better parts of table-cloths which have been discarded may be made into every-day napkins or tray-cloths. From the least-worn parts of sheets can be made pillow-cases for a child's bed or for common wear.

Old undershirts make the best dish and face cloths. It is well to have a drawer in the pantry or elsewhere for clean cloths of all kinds, old stockings, flannel, linen and cotton pieces, to be used when necessary. Another drawer for wrapping-paper and bags is useful. Twine from packages, wound in a ball, should always be handy. LAURA J. MAKEPEACE.

#### Handkerchief Bag

A dainty little bag can be made out of one fancy hemstitched handkerchief. Fold the handkerchief once, and sew the ends together. Finish the top with beading and lace, and run narrow ribbons both ways through the beading. MARIE WILKINSON.

Spring and summer styles for 1904 are portrayed in our new Pattern Catalogue. Send for it to-day.



## In "Queen City" Shops

ON A recent journey of discovery through the down-town district of Cincinnati, Ohio, the Household Editor, being "all eyes and ears" for things of interest to FARM AND FIRESIDE housewives, brought back to her desk memoranda of the following pretty and useful articles:

A set of scrim cuffs and collar in a pretty design of navy and "corn-flower" blue. The turnover was, as are all the newest collars, as wide as the neck-band of the dress, and the cuffs but a trifle wider. The specimens of scrim turnovers given recently in FARM AND FIRESIDE would do to "go by" in making a two-tint set.

A baby's bib made from half of a sheer white handkerchief edged with narrow lace.

A heart-shaped sachet-bag covered with latticed sea-green and white satin ribbons. The ribbon was half an inch wide. These are called "corsage sachets," and if worn inside the bodice give forth that delicate, indefinable perfume alike delightful and refined.

Ribbon rosettes for the hair. These were made of black or colored ribbons, and when finished resemble the shape of a dumb-bell, the balls at each end being small rose-like rosettes, and the cross-bar being a fold of the ribbon. These are worn with either a low or high coiffure. If the hair is worn low, the ribbon bar crosses the hair about half way down, and the rosettes are fastened with hair-pins. If the "knot" is high, the rosettes are fastened just back of it. Either way the little ornament is exceedingly pretty.

A collection of spring hats in the window of a fashionable milliner exhibited small shapes only. These shapes were of the "Colonial" style—three-cornered or nearly so—and were exceedingly pretty. One, in white and navy-blue straw braid, had no trimming save a smart knot of rich red velvet at the left side. This knot of course had some of the characteristics of a cockade. Then there was a brown straw with a decided point in front and little or no trimming. The color was golden brown, which is the prevailing shade this year, although grays of all conceivable tints follow closely after in popularity.

In another window, among the white waists was a lovely little blouse of oyster-gray. This was built on exceedingly plain lines, the oyster tint being its chief claim to admiring consideration.

"Dog-collars" of real and imitation pearls had cross-bands of brilliants, and were exceedingly pretty. It seemed rather incongruous to "ye editor," however, that these exquisite ornaments for my lady's slender throat should be called "dog-collars."

Little Dutch pictures in bright colors and dark wood frames were selling for a "song." Nothing could be prettier for the walls of a small room covered with a plain paper. Other pictures, representing scenes from Dickens and passages from Tennyson and Lord Lytton, were fascinating, and so cheap that no one need be without one or two of them.

Plain leather belts, very wide, with plain fastenings, are a fad of the hour, and with one all-over lace waist in écaru was worn a belt of leather in shining gilt. This was a trifle theatrical, however.

A neat little black taffeta stock had a piece of gilt braid at the base. This was tied four-in-hand, and the ends finished with a cream-colored lace appliqué. The upper edge was finished with single gold beads set on so as to resemble French knots. A black dress could want nothing prettier to brighten it up. This touch of gold appears in almost everything smart. It may be a brass button on a Napoleon hat, or a touch of gold braid on a somber gown, but it's there, and its appearance should be hailed with delight by all lovers of the truly artistic in woman's dress.

Many shirt-waist patterns cut just ready to put together had fancy bands, cuffs and collars in cross-stitch or in woven Persian designs.

A Battenberg table-cover in the natural linen color was too pretty for description.

Other articles, which must be illustrated by pictures, will be published in a later edition of this paper.

## In the Season of Shortage—Between Winter and Early Spring Supplies

When winter sets in we are generally abundantly supplied with fruits and vegetables, but along toward spring some supplies give out, and the appetite grows capricious, and the desire for something "different" often comes up obtrusively. The potatoes and meat, the common run of desserts, seem somehow inadequate. The vegetables have lost their freshness in a degree, and we are at a loss to know what to fix and to cook for the satisfaction of all concerned.

In many families a rut seems reached in regard to cooking. There will be virtually the same things for breakfast, or about the same, little change in the dinner menu, and supper seems to offer small scope for the cook.

A change is always good. If griddle-cakes have made the chief end of man for breakfast, change off to something else—let some of the many breakfast-foods have a place. Sometimes we like the foods that do not have to be cooked. I will not mention any special sort, as there are so many about the same, but any of the flaky breakfast-foods that do not need



## The Housewife

cooking are delicious served with a spoonful of fruit, sugar and cream. A most delectable dish is made from one of these foods, one spoonful of chopped pineapple (canned), and a few slices of banana or orange sliced very thin and marinated in sugar or covered with a prepared sugar-syrup. A dish of this sort will tempt almost any appetite. If more hearty food is desired, it can follow.

Some think hot biscuits are a "bother," but if one gets used to making them it really takes but a very few minutes. For breakfast you can fix the flour over night if you wish. Take one quart of flour if you have a hearty family of six, put into it one teaspoonful of salt and one good heaping tablespoonful of lard, though omit the lard until after the flour has been sifted with the baking-powder. Into the quart of flour put four small teaspoonfuls of baking-powder. Sift

We nearly always have a few chickens (?) to kill for a change, and these work in good for a variety of dishes—pot-pie, salad, etc.

For vegetables, if these are wilted, put them in water for some time, to let them freshen, prepare as usual, and cook. If beets are the subject under consideration, try fixing them like this: Cook very tender, then chop or cut in dice; make a clear cream dressing, rich and good, but not very thick, have just enough to thoroughly coat the beets, season well with pepper and salt, and serve hot. Another good way to fix beets is to chop two quarts of them, then chop the same amount of cabbage, and mix, adding one cupful of grated horse-radish, one cupful of sugar, and vinegar to cover. This makes a fine relish. Another way to fix beets is to chop or dice them, and serve hot, seasoned with pepper, salt and vinegar and plenty of good butter. Some think that when the beets are cooked it is sufficient if they are put into vinegar and served cold, but they are much more appetizing served hot. A nice way to fix some is to put them in a jar a layer at a time, sprinkling each layer well with sugar, and cover with vinegar. Use sugar enough to give a good sweet taste.

To serve rutabagas, or turnips, cook in a good deal of water—if inclined to be "strong" or bitter, change the water in cooking—and when they are very tender, take up, cut in dice, cover with hot vinegar, and season with pepper, salt and butter. This dish is quite a change from the ordinary mashed turnips, and makes a favorite with many when once tried. The turnips can be served in the same ways mentioned for beets, and they are very good.

If you are fortunate enough to have some carrots, these can be cooked in different ways. Clean them, cut in pieces about three inches long, cook very tender, cover with cream dressing thickened with a little flour, just enough to coat each piece well, and season with a little sugar, salt and pepper. This makes a very delicious dish. Carrots are good made into a sweet or sour pickle, and these can be used as the beets. Carrots, beets and turnips may all be chopped and fixed with horse-radish, the same as for beets. The vegetables may be used singly or in combination.

Potatoes are often withered in spring, and they may be freshened some by letting stand in cold water before paring. Try making some potato shoe-strings as follows: Crisp the potatoes in cold water, then cut them in small lengthwise pieces, and cook a few minutes in boiling water; pour off the water, and cover with cream which has been thickened and seasoned well. Care should be taken not to break the pieces of potato, and they will probably go to pieces unless they are crisped before cooking. These shoe-strings may be put into a beef-stew, and also used in various ways.

Cabbage and onions cooked together make a delicious dish, and one not common in the North. Take about one third onions to the amount of cabbage, and cook until tender. The onions will need to cook longer than the cabbage. The latter will not need more than thirty minutes, and the onions about an hour. Combine them, and season with vinegar, butter, pepper and salt.

There are countless desserts that can be made. Oranges make delicious shortcakes, as almost every one knows, and they are inexpensive in the spring, when most desired. They can be marinated in sugar, and put in blanc-mange.

If you have apples that are rather tasteless, they will make delicious pies if a few gooseberries are added. It is well to put up a few cans of these acid berries, as they are great appetizers, make delicious shortcakes, and give a zest to a jaded appetite if not served too often. Canned pie-plant, too, sometimes lacks the fresh acid so desirable in spring. The gooseberries will also combine with this. Sometimes even a little vinegar is good, if nothing better is at hand to impart acidity.

Some folks claim they do not care for canned strawberries. If these are at hand, I think even the disclaimers can be brought to admit their usefulness if the berries are made into a shortcake, and served with cream. If the strawberries are not sweet enough for this dessert, heat them, and add sugar. It is also a good scheme to add a little thickening to the juice. One teaspoonful of corn-starch will give a "body," and make it seem better. I have known folks, in using gooseberries, to use a good deal of water, as the acid is sufficient to flavor a good deal of juice, then thicken the juice with corn-starch. The fruit goes further, and no one objects or would know unless let into the secret. Never put them up this way, but in using you can dilute and thicken if you wish.

Don't run entirely to custard pies just because there are plenty of eggs in the spring; but custard pies will be a treat to most folks after the high price of eggs the past winter. In using the same, a cupful of sweet cream will not impair the taste of the pie, and a handful of shredded cocoanut will also make a change.

Cocoanut is good sprinkled on the top of chocolate frosting. It gives a nutty flavor along with the chocolate that is especially good.

There are many things, even where a great variety of fruits and vegetables are not at hand. A change can be made if the one who cooks is willing to get out of the rut. It is a delight to manage well, and the woman who does so on a short allowance deserves double praise.

ROSE SEELYE-MILLER.



"LILIES"

the flour once or twice, then add the lard, and mix. This can be done over night, if desired. In the morning take two cupfuls of buttermilk, and stir into it one very small even teaspoonful of soda. Put this into the prepared flour, and mix up. It will probably not take more than three minutes to do it. Roll quickly, and cut small. It will take about five minutes to bake the biscuits if cut small, and they are much better this way. I know many think baking-powder and soda should not be combined, but baking-powder biscuits are much better made with the buttermilk and soda than without. Try these a few mornings, and you will probably try them often afterward.

If you have had fresh beef and pork all winter, as most farmers' families do, try something different. The hams are probably about ready for smoking. Have this done, and some delicious slices of ham fried or cold boiled make a dish acceptable to most folks.



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## Selections

### An Easter Hint

BY MAE ELLIOTT

A very tiny seed was placed,  
As seemed by evil power,  
Down in the cold and dreary earth—  
It fain had been a flower!  
Dismay and grief its spirit claimed,  
While hope's ambition quailed;  
To it the change had meant defeat,  
It thus such fate bewailed:

"How may I ever, ever grow  
Here in this dismal cell?  
My purpose was to brighten earth,  
And glad some thought compel.  
I need the sun's inspiring smile,  
The zephyr's soft caress,  
The dewdrop's kiss, the gentle rain,  
To best my life express."

Sweet Hope, unheeded for a time,  
A solace quickly gave.  
"Oh, little seed, look up," said she,  
"Yourself you yet may save.  
The sun, the wind, the rain, the dew,  
Are very, very near;  
Just strive to 'scape your prison bounds,  
And all will aid and cheer."

The strange, new message wonder wrought—  
The tiny seed began  
To work its own salvation out,  
And realized its plan.

"Little Jack Horner"

THE Chinese empress is complimenting herself upon the position she has taken up with regard to the integrity of China. The position, which has been the result of outside events, she looks upon as a delightful piece of patriotism on her own part. She has probably not heard the "pidgin English" version of "Little Jack Horner," but it fits the situation:

"Little Jack Horner,  
Makee sit inside corner,  
Chow-chow he Clismas pie;  
He puts inside t'um,  
Hab catchee one plum,  
"Hai yah! what one good chilo my!"

Of course, you know that "pidgin English" means "business English." "Pidgin" is the nearest the ordinary Chinese can get to "business." Thus, religion is "Joss pidgin," cookery is "chow-chow pidgin," courtship is "love love pidgin," and a priest is "a Joss pidgin man." A Chinese convert once described a Methodist bishop as "top-side piecee Heaven pidgin man."—London Referee.

### Indian Territory Exhibit


The World's Fair exhibit from the Indian Territory is now being collected under the authority of the Fair Commission, and within the next thirty days the work of arranging and installing the exhibits will commence. On the building and ground and furnishings will be expended about twenty thousand dollars. "Because of the limited funds, the Territory World's Fair Commission has deemed it advisable," says Mr. Hubbard, the territorial commissioner, "to make exhibits only in the following departments: In the Mines and Metallurgy Buildings will be maintained the coal and coke, marble, granite and oil exhibits; in the Palace of Agriculture will be shown the corn and cotton exhibits; in the Horticulture Building will be maintained the exhibits of the orchards and gardens of the Indian Territory. All other exhibits, such as the photographic, educational, mineral specimens, etc., will be installed in the Indian Territory Building proper."—Kansas City Journal.

### Trotting the Horse Down Hill

"Many drivers think that the horse should trot down hill because the load does not pull back upon him, and apparently cannot understand the philosophy that would do otherwise," says "Prairie Farmer." "To trot when there is a heavy load pulling back on the traces is exhaustive to the horse's muscular energy. Trotting down hill, especially with a load in addition to its weight pushing down upon him, is far worse. The former, if not carried to excess, will be readily regained by the aid of a little rest and nourishment, but the latter jars and jams the shoulders, weakens the tendons and springs the knees, and may even bring on paralysis of the nerves and muscles. The horse left to its own inclination will slacken its pace when it comes to a decided down grade, and will go carefully down the hill, unless it has been trained to a different habit under spur of the whip. If it is necessary, for some reason, to drive fast down hill, put on the brake to at least prevent the wagon pushing on the horse; if it can be made to draw a little on the traces, it will help materially to lessen the injurious effects."—American Cultivator.

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## Sunday Reading

### Easter



ASTER is one of the great annual festivals observed throughout Christendom in commemoration of the resurrection of our Lord Jesus Christ. The word Easter, like the names of the days of the week, is a survival from the old Teutonic mythology. Bede tells us it is derived from Eostre, or Ostara, the Anglo-Saxon goddess of spring, to whom the fourth month, answering to our April, was dedicated, and that this month was the same as the "Mensis Paschalis," when the "old festival" was observed with the gladness of a new solemnity.

Neither in the New Testament nor in the writings of the apostolic fathers do we find any trace of the celebration of Easter as a Christian festival. Origin urges that the Christian who dwells on the truth of Christ as our Passover and the gift of the Holy Ghost is every day keeping an Easter and pentecostal feast. It is doubtless true that the first Christians continued to observe the Jewish festivals as commemorative of events of which these had been the shadows, and thus the Passover, made even more sacred by the thought of Christ, the true paschal lamb, the first fruits of the dead, continued to be celebrated, and became the Christian Easter.

Between Christians of Jewish and Gentile descent there existed a long-continued and bitter controversy as to the date of the observance of the paschal feast, and this led to an unfortunate severance of Christian union. The point at issue really was the date of the termination of the paschal fast. With the Jewish Christians, whose leading thought would be the death of Christ as the true

of usage. The Roman Christians adopted the ordinary Gentile usage, which within certain limits placed the observance of the crucifixion on a Friday, and that of the resurrection on the following Sunday. Yet although measures had been taken to secure uniformity of observance, several centuries elapsed before all discrepancies ceased. The rule was finally established that Easter Day must fall upon the first Sunday after the full moon which happens after the twenty-first of March. Therefore, the coming of the day varies, but the limits within which it must fall are the twenty-second of March and the twenty-fifth of April inclusive. In the year 1818 it fell on the earliest date, but cannot again until the year 2285.

The Catholic and Episcopal churches hold Easter in special esteem, and it is becoming the custom of nearly all Protestant churches to have special services and decorations commemorative of the resurrection. The miracle of the resurrection of the body is appropriately symbolized in the reappearance of the flowers, the budding of bare brown trees, and the soft verdure returning to the barren fields.

Among the Jews it was customary to build a great fire in the open air on Easter Eve, into which was cast all the leavened bread. Although this fire has fallen largely into disuse, there is at the present day in Jerusalem a ceremony called the "Miracle of the Easter Fire." For over three hundred years the Latin churches have refused to take part in this, the Roman Catholics opposed it, and now its only participants are the Greek and other Oriental churches. The Greeks claim that the ceremony comes down the long ages from the apostles, and that their candles are actually lighted by a fire sent from heaven. It is also claimed that this holy fire appears at precisely two o'clock in the afternoon of every



EASTER LILIES

paschal lamb, this fast would end at the same time as that of the Jews, at evening on the fourteenth day of the month, and the Easter festival would immediately follow, irrespective of the day of the week. The Gentile Christians, unfettered by Jewish traditions, identified the first day of the week with the resurrection festival, and the preceding Friday would be kept in commemoration of the crucifixion, irrespective of the day of the month. With the one, therefore, the observance of the day of the week, with the other the observance of the day of the month, became the ruling principle. In consequence, so much dissension and controversy arose that the Church was not only distracted, but became a source of mockery and ridicule to unbelievers.

The verdict of the Church of Rome gradually brought to an end this diversity

Easter Saturday in the tomb of the Holy Sepulcher. Through the holes in the walls of the sepulcher candles are passed to the patriarch of Jerusalem, who is inside. These are returned ablaze, presumably lighted by the sacred fire, and other candles are lighted from these. Swift messengers carry this holy fire throughout the length and breadth of Palestine, to Bethlehem, and to all parts where the pilgrims travel. Hundreds of people sleep during the previous night in the various chapels, that they may secure good places on the morrow, and there they will stand for hours waiting in patience and thrilling expectation for this miraculous holy fire.

In the ancient church the Easter services lasted eight days, and it was formerly the favorite time for baptism.

MARY FOSTER SNIDER.

## Nature's Greatest Cure For Men and Women

**Swamp-Root is the Most Perfect Healer and Natural Aid to the Kidneys, Liver and Bladder Ever Discovered**

### Swamp-Root Saved My Life

I received promptly the sample bottle of your great kidney remedy, Swamp-Root.  
I had an awful pain in my back, over the kidneys,



MR. T. S. APKER.

and had to urinate from four to seven times a night, often with smarting and burning. Brick-dust would settle in the urine. I lost twenty pounds in two weeks, and thought I would soon die. I took the first dose of your Swamp-Root in the evening at bedtime, and was very much surprised; I had to urinate but once that night, and the second night I did not get up until morning. I have used three bottles of Swamp-Root, and to-day am as well as ever.

I am a farmer, and am working every day, and weigh 190 pounds, the same that I weighed before I was taken sick.

Gratefully yours,  
Sec. F. A. & I. U. 504. T. S. APKER,  
April 9, 1903. Marsh Hill, Pa.

There comes a time to both men and women when sickness and poor health bring anxiety and trouble hard to bear; disappointment seems to follow every effort of physicians in our behalf, and remedies we try have little or no effect. In many such cases serious mistakes are made in doctoring, and not knowing what the disease is or what makes us sick. Kind Nature warns us by certain symptoms, which are unmistakable evidence of danger, such as too frequent desire to urinate, scanty supply, scalding irritation, pain or dull ache in the back—they tell us in silence that our kidneys need doctoring. If neglected now, the disease advances until the face looks

pale or sallow, puffy or dark circles under the eyes, feet swell, and sometimes the heart acts badly.

There is comfort in knowing that Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, fulfils every wish in quickly relieving such troubles. It corrects inability to hold urine and scalding pain in passing it, and overcomes that unpleasant necessity of being compelled to get up many times during the night to urinate. In taking this wonderful new discovery, Swamp-Root, you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered.

### Swamp-Root a Blessing to Women

My kidneys and bladder gave me great trouble for over two months, and I suffered untold misery. I



MRS. E. AUSTIN.

became weak, emaciated and very much run down. I had great difficulty in retaining my urine, and was obliged to pass water very often night and day. After I had used a sample bottle of Dr. Kilmer's Swamp-Root, sent me on my request, I experienced relief, and I immediately bought of my druggist two large bottles, and continued taking it regularly. I am pleased to say that Swamp-Root cured me entirely. I can now stand on my feet all day without any bad symptoms whatever. Swamp-Root has proved a blessing to me.

Gratefully yours,  
MRS. E. AUSTIN,  
19 Nassau St., Brooklyn, N. Y.

**To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy, Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail.**

**SPECIAL NOTICE.**—So successful is Swamp-Root in promptly curing even the most distressing cases of kidney, liver or bladder troubles, that to prove its wonderful merits you may have a sample bottle and a book of valuable information, both sent absolutely free by mail. The book contains many of the thousands upon thousands of testimonial letters received from men and women cured. The value and success of Swamp-Root is so well known that FARM AND FIRESIDE readers are advised to send for a sample bottle. In sending your address to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say you read this generous offer in the FARM AND FIRESIDE.

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SAVE A THIRD**

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Columbus, Ohio.



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Ready made and made to order.  
Handsomely made and trimmed.

**Boys' and Children's Suits and Knee Pants**

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### A Turkey Red!

on cotton DOUBLE THE STRENGTH of old kinds is made with new "PERFECTION" Dyes. Our seventy popular colors are unexcelled for brilliancy and fastness to light, air, soap and acids. Simple, sure, no dull, dingy or uneven effects. PERFECTION Dyes are specially made for coloring rug and carpet fringe, and we send six large packages, any colors, by mail for 40 cts., 3 for 25 cts., or 1 for 10 cts.

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\$5.00 to \$10.00. We don't sell through dealers, but save you a big profit and allow you long trial. Handmade Violin Catalog FREE.

E. T. ROOT & SONS, 347 Wabash Av., Chicago



## How to Dress



SERITA WAIST AND BARRINGTON SKIRT

THE woman who plans her spring and summer wardrobe after the designs shown on this page can be confident that her clothes will be all that they should be—smart and original in style, correct in outline and the very latest as to detail and trimming.

### Doris Waist and Duer Skirt

For a dainty evening gown which has the new quaint air about it nothing could be prettier than this model. The waist is a simple blouse cut collarless and made



SHIRT-WAIST WITH WIDE BOX-PLAIT

with a deep lace yoke, which extends over the shoulders. The lower part of the sleeve is of lace like the yoke, and fits the arm closely. The upper part is made of the material of the frock, with a deep lace frill. The skirt is a circular model, with the slight fullness at the back of the waist gathered for about two inches. Folds of the material trim the lower part of the skirt, as well as outlining the yoke. Each fold is headed with a

band of moire silk, which in the front is finished in a quaint little old-fashioned bow. Crêpe de Paris is a charming material for this gown in champagne-color, with baby-blue moire bands and bows. Or in canary-color crêpe de Paris, trimmed with violet moire, it would look pretty and dainty. The lace which is used for a cut-out design on the skirt and for the undersleeves and the yoke of the waist may be one of the very fashionable silk laces in cream-color; or a much less expensive Venise lace may be used, either cream-white or dyed to match the gown in color. The pattern for the Doris Waist, No. 181, is cut in sizes 32, 34, 36 and 38. The pattern for the Duer Skirt, No. 182, comes medium.

### Serita Waist and Barrington Skirt

Nothing could be more simple to make than this dainty frock, which owes its dressy effect entirely to the trimming. The waist is a collarless blouse trimmed with stitched bands of the material, and also silk embroidered with large French knots. The waist blouses a trifle over the girdle at the back. The collar and the shoulder-cap extend across the back. The Barrington skirt is a seven-gored model, with the plaits arranged in fan-shape at the bottom of each seam. It has an inverted plait at the back, and the trimming on the skirt matches that used on the waist. Albatross, silk poplin, veiling, Henrietta cloth or cashmere are all materials suited to a gown of this style. Taffeta silk embroidered in French knots is used for the trimming; or if preferred, canvas may take the place of the silk. This costume would be very original and effective in brown veiling, with violet silk as the trimming, embroidered with French knots in a paler shade of violet. It would also look very charming in silver-gray cashmere trimmed with pale blue silk, embroidered in steel-gray to represent nail-heads. The pattern for the Serita Waist, No. 179, is cut in sizes 34, 36 and 38. The pattern for the Barrington Skirt, No. 180, comes medium.

### Shirt-Waist with Wide Box-Plait

That this shirt-waist is sure to win favor with the spring and summer girl is apparent from the fact that the design may be effectively carried out in strikingly different materials. It is an appropriate model to use for the shirt-waist of momie-cloth or cotton rep, with Scandinavian embroidery motifs or Russian cross-stitch designs as the trimming, while it is equally suitable for the soft, filmy shirt-waist of Persian lawn or dimity trimmed with Mexican drawn-work designs or lace appliques. The shirt-waist is made with a four-inch-wide box-plait down the front. The upper part of the waist is tucked to yoke-depth, and the plain effect of the back is broken by four narrow tucks down the center back. The bishop-sleeve is finished with a band cuff, and the waist fastens invisibly under the box-plait. The idea of introducing a touch of color in the embroideries which trim a white waist will be a favorite little dress fad of the coming season. And to have her stock and belt match in color the predominating tint used in the embroideries is another fashion fancy which the well-gowned shirt-waist girl will be sure to observe. The pattern for the Shirt-waist with Wide Box-plait, No. 246, is cut in sizes 32, 34, 36 and 38.

### Marjorie Eton and Darlington Skirt

It is not always an easy matter to find just the right gown for a girl of fourteen or thereabout. This gown was designed with the purpose of giving graceful lines to the young wearer. For spring days it would be charming made of one of the new crashes with an embroidered border done in the Persian colors, or it might be of etamine with the trimming of fancy silk braid. The tunic skirt has its upper flounce fitted to the figure by narrow tucks, and the collarless Eton need not always be worn with this skirt, but will be found a useful little garment when one requires a separate jacket. The pattern for the Marjorie Eton, No. 129, is cut for 14 and 16 year old sizes, and the pattern for the Darlington Skirt, No. 130, is cut for 14 and 16 year old sizes.

There is a dash of gold in many of the spring gowns and hats. The effect is extremely pretty.



DORIS WAIST AND DUER SKIRT



MARJORIE ETON AND DARLINGTON SKIRT

### PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

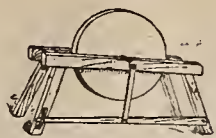
Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.



## Prize Puzzles

We Want to be Neighborly, and so Invite all of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.



### DOG PUZZLE

Each of the Six Pictures Given Below Represents a Certain Breed of Dog. Can You Make Out the List?

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before April 15th.

### ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a copy of a dog picture, entitled "An Impudent Puppy," will be given for the first correct list of answers received from each state and territory. This means a picture for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each

state wins a prize, giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the prize pictures will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.



### ANSWERS TO PUZZLES IN THE MARCH 1st ISSUE

#### The Garden Vegetables

- |           |                           |
|-----------|---------------------------|
| 1—Beet.   | 6—Potato.                 |
| 2—Onion.  | 7—Spinach.                |
| 3—Radish. | 8—Carrot.                 |
| 4—Bean.   | 9—Tomato.                 |
| 5—Peas.   | 10 (The picture)—Cabbage. |

The cash prizes are awarded as follows:  
Girl's cash prize, two dollars—Gladys Halden, Greensboro, North Carolina.  
Boy's cash prize, two dollars—J. Gordon Laing, Dundas, Ontario, Canada.  
Woman's cash prize, two dollars—Mrs. Della C. Stowe, Kemper, Illinois.  
Man's cash prize, two dollars—J. G. Nowlin, Lynchburg, Virginia.

As a consolation prize, a "History of the United States" is awarded to the following persons, whose lists of answers were the first to reach us from their respective states:

Alabama—Mrs. J. J. Rocks, Anniston.  
Arizona—Nellie Byrd Banks, Phenix.  
Arkansas—T. O'Brien, Forrest City.  
California—Wm. Booth, San Jacinto.  
Canada—New Brunswick—Mrs. Bessie Branscombe, Somerville.  
Nova Scotia—J. D. Matheson, Maccan.  
Quebec—W. B. Meldrum, Hull.  
Colorado—Mrs. R. S. Cox, Denver.  
Connecticut—Miss Bessie Bransfield, Portland.  
Delaware—Mrs. J. M. Huntley, Dover.  
District of Columbia—Lillian Tucker, Washington.  
Florida—Mrs. A. T. Morgan, Orangepark.  
Georgia—Mrs. Fannie Chambers, Morganville.  
Idaho—Mrs. Alex Johnston, Weiser.  
Illinois—D. S. Cable, El Paso.  
Indiana—Elizabeth Fry Wright, Peru.  
Indian Territory—Mrs. R. A. Witherill, Tahlequah.  
Iowa—Laird Stetler, Mount Pleasant.

Kansas—Mrs. U. T. Ninninger, Ottawa.  
Kentucky—Mrs. J. T. Ligon, Nebo.  
Louisiana—Mrs. Anson Doolittle, Donner.  
Maine—Louis W. C. Goodwin, Old Orchard.  
Maryland—Mrs. Eliza Logsdon, Barton.  
Massachusetts—E. C. Sparks, Chicopee.  
Michigan—Percy Dean, Jackson.  
Minnesota—B. K. Wolfe, Kellogg.  
Mississippi—Miss Frances Jobe, Columbus.  
Missouri—Mrs. Catherine Smith, Valda.  
Montana—Arthur L. Shepherd, Jr., East Helena.  
Nebraska—Mrs. C. F. Hall, Greenwood.  
Nevada—Mrs. Fred R. Birdsall, Winnemucca.  
New Hampshire—Miss Emma J. Sawyer, East Jaffrey.  
New Jersey—Lizzie Drinkhouse, Camden.  
New Mexico—K. H. Aber, Tucumcari.  
New York—Mrs. Delle H. Fisk, Morganville.  
North Carolina—Mrs. S. A. Kelly, Charlotte.  
North Dakota—Wallace Edwin Raze, Buffalo.  
Ohio—Mrs. Wm. F. Beheman, Cincinnati.  
Oklahoma Territory—Otis Hain, Newkirk.  
Oregon—Lillie Hesse, Hillsboro.  
Pennsylvania—Grace E. Minnich, Landisville.  
Rhode Island—Rose Callan, Bristol.  
South Carolina—Mrs. Chas. D. Jones, Lancaster.  
South Dakota—Willie L. Pier, Parker.  
Tennessee—Bascom Byrns, Jr., Cedar Hill.  
Texas—Miss Margaret Collins, Paris.  
Utah—Mrs. Geo. Harper, Murray.  
Vermont—Miss L. M. Bostwick, Vergennes.  
Virginia—Mrs. S. M. Loyall, Millboro.  
Washington—Dorothy Riker, Centralia.  
West Virginia—B. D. Gangwer, Parkersburg.  
Wisconsin—Mildred Ahrens, South Milwaukee.  
Wyoming—Miss Eleanor Eggs, Greenriver.

#### Conundrums

What herb is most injurious to a lady's beauty? Thyme.  
Why are clouds like coachmen? Because they hold the rains (reins).  
Why is a woman's beauty like a bank-note? Because when once changed it soon goes.  
Why is a school-boy being flogged like your eye? Because he is a pupil under the lash.

"Let the GOLD DUST TWINS do your work"



It's really Magical

the way the Gold Dust Twins handle the dishes. A little sprinkle of

## GOLD DUST

softens the water, cuts the grease from cups and saucers, pots and pans and makes real labor seem like play.

When you stop to think that dishes must be washed **1095 times a year**, this means something. Buy a package of Gold Dust today and try it.

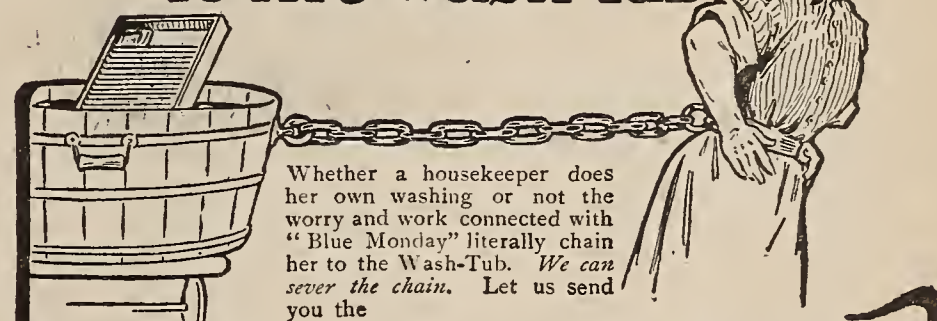
OTHER GENERAL USES FOR GOLD DUST

Scrubbing floors, washing clothes and dishes, cleaning wood-work, oilcloth, silverware and tinware, polishing brass work, cleansing bath room, pipes, etc., and making the finest soft soap.

Made by THE N. K. FAIRBANK COMPANY, Chicago, — Makers of FAIRY SOAP.

**GOLD DUST makes hard water soft**

## Are You Chained To The Wash Tub



Whether a housekeeper does her own washing or not the worry and work connected with "Blue Monday" literally chain her to the Wash-Tub. We can sever the chain. Let us send you the

## "1900" Ball Bearing Family Washer

**FREE TRIAL** Freight prepaid. No money or promise of any kind is required. Use it for thirty days; then if you do not wish to purchase return it at our expense. We pay the Freight both ways. Unlike all other washers, the "1900" sends the water through the clothes and washes them absolutely clean in six minutes with no wear or tear on the garments or the operator. Perfectly adjusted Ball-Bearings do the same for it as for the bicycle—make it work with little effort.

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Write today for full information and Free Catalogue.

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International Harvester Co. of America, Chicago, U. S. A.

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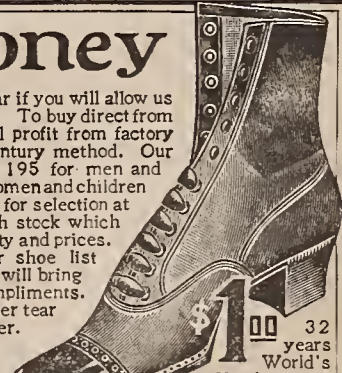


will go almost twice as far if you will allow us to furnish your footwear. To buy direct from us is to pay but one small profit from factory to wearer—the 20th-century method. Our special shoe lists—No. 195 for men and boys, and No. 265 for women and children—bring into your home, for selection at your leisure, a mammoth stock which will surprise you in variety and prices. Your request for our shoe list (either No. 195 or 265) will bring it promptly, with our compliments. Please don't forget—better tear this out now as a reminder.

Address

Montgomery Ward & Co.

Michigan Ave., Madison and Washington Sts., Chicago.



32 years World's Headquarters for Everything



"MIDDLETON, by all that's great!"

"Why, Jarvis, where did you come from? And you, Masters?"

"We didn't have to come. This is home. You are the one to tell us where you came from."

"I can say nearly the same thing that you have, for this city is now my home; but it's true that I've come to town very recently."

"Well, have you been to lunch? No? Come on with us, then. We want to know what you've been doing while out of our sight."

When the three men who had not seen one another for ten years were seated—at least, two had not seen the other—Jarvis and Masters looked the new arrival over with much interest. They had been unusually intimate as boys and young men, but Middleton had finally drifted away, and had been entirely lost sight of. His present appearance indicated a state of health, wealth and happiness that had scarcely been promised by his earlier career, and his companions were eager to hear his story.

"Yes," he responded to their looks of inquiry, "this is home, for I live with my family in the suburbs."

"Family, eh? Masters and I have been married several years, but you, er—"

"Oh, don't hesitate," Middleton laughed. "You wonder how such a spendthrift as I ever could afford to marry. Am I not right?"

"Just about, I may as well confess."

"Let me add to your surprise by saying that besides being here with my family I am here to live on my money—retired at thirty-five from all but gilt-edged investments."

"You take away a fellow's breath! Can't you tell us about it? There must be something unusual somewhere in it."

"There is."

"Well, then, unless of course there's some reason—"

"Oh, no, not in the least. We used to tell one another about everything, and I don't know but we may as well resume confidences now that we shall meet frequently. My fortune came to me by the most extraordinary circumstance you ever heard of. A ghost is the source of it."

"A ghost!" his two friends exclaimed. "Oh, no, Mid, you can't palm off any of the old rigmarole on us now, in our mature wisdom."

"Honest, though. Do you want to hear about it?"

"Of course. We haven't forgotten your old yarns. We're listening."

"Yes, but I tell you that this isn't one of the old yarns. However, I'll let you hear the whole thing, and you can form your own opinion, so here goes."

"You know that I had three characteristics which used to stand out rather more prominently than others—the knack of making money, the foolishness of getting rid of it in a hurry, and a highly wrought imagination. I suppose the last trait was in your mind when you referred to my prospective statement as one of my 'old yarns.' Undoubtedly it was these three in concerted action, with the last in the ascendant, that operating by some hidden law brought me into conjunction with the unseen powers and put me in the opulent state. This is how it came about:

"When you last knew of me I was at the bank. In the way of business I had considerable to do with Mr. Atherton, whom you of course remember. For some reason or other he took quite a liking to me, and invited me to his home. I returned his affection by taking more than quite a liking to his daughter, the handsomest, sweetest—"

"Hold on! Story, please."

"Well, she's Mrs. Middleton now, and I haven't changed my opinion, so you can fill it in to suit yourselves."

"As soon as I met her I went to saving with the desperate hope that when I got a little ahead I could make a fortunate investment and be enabled to marry. Well, when the bank went down I was out of a good place, but fortunately my savings were located elsewhere, and I was not altogether cut off from expectation. Just then I did a foolish thing. I told Mr. Atherton how I felt toward his daughter, in the hope that he would give me a chance somewhere. It had the opposite effect, and whatever good opinion he entertained toward me was summed up in the declaration that he liked me well enough as a young friend, but that if I aspired to the hand of his daughter I must be able to draw my check for at least one hundred thousand."

"This let me down a good deal, but in the process it thoroughly stirred me up. I told Miss Atherton how matters stood, and that if I had her encouragement I should go hard after that hundred thousand. Of course, I felt pretty sure of her answer, and when I got it I started out for the money. As I look back to that time I am amazed at my enthusiasm, but I was in dead earnest then."

"I came down from our small town to this big New York City, thinking that all kinds of fortune awaited the right man here. After a week I began to lose confidence, and one day I took the cars to get out in the country and think a while. I alighted at a village, and renting a wheel, struck off along a lonely road, where everything would be quiet."

"As I bowled ahead, trying to let the imagination that had spun so many impossible stories for your entertainment suggest some scheme for getting rich with the few thousand I had on hand, I came upon the most picturesquely situated residence that I ever saw. The plan I was after came to me in a moment. If I could only secure this place, and draw the attention of some wealthy city resident to it as desirable for a country house, I could probably double my money in six months."

"This was not such a mad scheme as you may suppose, for the locality had wonderful natural beauty and possibilities. I shall not stop to tell you about that, however, but get along in the direct line of my story. I turned into the driveway to see what I could learn, and found that the place was without inhabitant. Inquiry at houses in the vicinity brought to light the fact that no one wished to rent or buy the property, because it was haunted. This was stated in sober

## The Ghostly Arm

By MILFORD W. FOSHAY

earnest by the ruralites, and served to give zest to my pursuit, for it would tend to cheapen the price. As I had no faith in any other ghosts than those of my own creating, that part of it did not trouble me.

"It took me several weeks to get the deed. Then I believed that a little tidying up would add to the salability, so I hired some men and directed them in the work. As this would take up the time until late in the fall, and since it would be necessary for some one to be on the ground to give information to any one who might answer my advertisements, I moved in. Board was obtained at a neighbor's, but I roomed in the house, which was quite old-fashioned and substantially built."

"Time slipped by, and I had several possible purchasers. Finally one man took an option on it until spring. He paid me one hundred dollars, provided I was willing to remain and look after it. I agreed, as I had nothing special to take me elsewhere. It was now the middle of November."

"After the sale was thus practically made, time hung much heavier on my hands. I no longer had the stimulus of expectation, and often felt lonesome and tired of the situation. Such a state was inclined, as it always had been, to excite my imagination, and I occupied much of my leisure in concocting the most unlikely vagaries that ever came to any one. This was my especial occupation during the long evenings."

"Thus the weeks passed until Christmas eve. I might have gone home for the holidays, but I was determined to do so only when I had made considerable progress in financial gains. Well, late that evening I made a fire in the grate, which was not one of the modern kind, but built of brick. Then I sat down before it in an arm-chair, ready to let fancy direct my thought. Taking the solitariness of the location into account, and the rather ancient appearance of the room in which I sat, it was not difficult to have the imagination run."

"In this way I was soon able to see that the fire blazing in front of me was in an old-time fireplace heaped high with logs and flanked by andirons. Playing about the floor, too, were the children of years ago in their dress so quaint, while at my right the open pantry was stocked with an abundance of pies and doughnuts and cakes whose peers are now so few and far between—utterly unobtainable in the home that depends on public-bakery products. And this not only because the cookery of our grandmothers possessed a superior relish, but that there went with it the unspoiled appetite and homely heartiness which made genuine the delights of the occasion. Certainly the Christmas cheer of earlier days had in it that which the artificial and more spectacular observance of later times fails to give of solid satisfaction."

"So I mused. Soon bedtime for the youngsters came. With many whispers and much smiling they disposed their stockings about the chimney-place. The younger children were inclined to be awed and respectful, but the older ones, into whose minds questions had come regarding the performance, hinted aloud their wishes, and nodded knowingly to one another."

"After they were gone I could hear the parents move about the room, preparatory to retiring, but not, I supposed, until Santa Claus had made his visit to the waiting stockings. In this I was mistaken. How long their preparation continued I do not know, but it was a rather long time, and no Saint Nicholas had ventured near, when I heard a door shut, and all was still. They were certainly gone, and it was time for me to go, too, the vision now being over."

"I sat a little while in the quiet that came to my mind, and just as I was ready to rise the clock on the mantel struck twelve. I continued to sit still, listening for the last faint echoes, when I saw the shadow of an arm on the brick at the right side of the chimney. It was a peculiar shadow, at once arousing my curiosity, and really startling me a little. Up to this time I had not seen or heard the slightest indication of any visitant or occurrence that could ever have given the reputation of being haunted to the house. Might not this be of that character?"

"The peculiarity in this appearance was its extreme thinness, as nearly as I can express it. There was no hindrance whatever to sight. I looked right through it, and saw the divisions of the bricks. I recognized this much at the first instant that it came before me, but as it moved I was attracted still further to the side, where the arm that made the shadow was to be seen distinctly. The moment my eye fell on this I saw at once why the shadow had the peculiarity mentioned—that from which it came was precisely like it in this respect. I could see through the arm itself as readily as I did through the shadow!"

"Now, never having met any ghosts but those in my own mind, I was for the moment awed and subdued. Naturally I glanced to get a look at the person who owned the arm. You may know that I was still more startled when I saw that there was no person. The arm from the finger-tips to the shoulder, and its shadow, made up all that was visible. Truly this was uncanny, and I virtually stopped breathing as I saw that shoulderless arm move slowly toward the chimney."

"I watched it with an utter absorption, and saw the fingers begin to work at the bricks. I could not see the bricks move, but the arm suddenly disappeared up to the elbow. I shivered. There before my eyes was that part of an arm from the elbow to the shoulder, and attached to no body, and from the elbow to the hand it was shoved out of sight into solid brickwork!"

"A moment after the hand entered the wall I heard a 'chink, chink, chink,' seven times, as distinct as if I were dropping silver dollars into a pile. When the noise ceased the arm was withdrawn, and disappeared as suddenly as it came."

"I sat quite still for several minutes. I need not

blush to say that the spirit of investigation was not very strong in me beyond looking over my shoulder and glancing into the corners of the room. But the more I thought about this singular occurrence, the stronger grew the impression that the arm and its movements were designed to give me directions of some sort. This worked on me until I pulled myself together and decided to look more fully into the affair."

"I first spent half an hour trying to find out if there was not some natural cause for the appearance—something hanging about the room that would cast just such a shadow. I discovered nothing that was even remotely satisfactory, and convinced that the arm was supernatural, I keyed myself up and took a lamp close to the chimney. No marks of any kind were to be seen. With the activity of search my full self-control returned, and also, instead of a lessening, as would be natural, there was a deepening of the conviction that there was some important information for me in the movements of the arm."

"I took out my knife, and carefully pricked all over the place where the hand entered the wall. On one end of a brick I found a circular hole, as if it had been ground out, but now filled with dust. In this a ring was sunk, and when I got my finger through it you can imagine my feelings, for it had certainly been put there to open an aperture. If I pulled, what would be the result? Would a door swing open and disclose a skeleton? It took some nerve to pull, but I was never given to hesitancy, and so gave a jerk."

"Nothing stirred. I tried again, with a strong, steady movement. At this two bricks came away in my hand, upheld by the ring. They had been fastened together on the inside, and the ring was bolted through. I tried to get the light to shine in the opening, but could not. Then I ventured with my hand and arm, as I had seen the ghostly arm do, but I could not reach anything."

"I was much excited, and determined to tear the wall away. That hole was made for some purpose, and I was going to learn what. I brought some tools, and went to work. I supposed that I should have to go to the level of the floor, but when I had taken out about two feet two bricks wide I came to a shelf, upon which rested a small wooden box. Eagerly I drew this out, expecting to find money, for it came to me as obvious that the chinking sound made by the ghostly arm was designed to tell that there was money within for me. But as I took up the box my spirits fell. It could not have weighed more than half a pound."

"The reaction from my hope was so great that I went to the table slowly, and opened the box with a feeling something like disgust. A note was lying beside a small bottle. This I unfolded, and read with a slight curiosity, which became exasperation by the time I was through. It merely said that the bottle in the box contained an imprisoned genie in liquid form, whose purpose was to benefit the finder by turning all iron upon which it was poured into gold."

"'A hoax!' I exclaimed, in anger from my overstrained nerves. Then I stopped short. How had I found that bottle? By means more occult than I could explain. And there was no denying anything, for box, bottle and note lay before me. If the ghostly arm could do so much, what might not the liquid do? I sobered down. The whole thing was plainly of a piece, and having gone so far, it might be well to go the entire length."

"My ardor revived. I took the bottle up gingerly, and held it to the light. It was filled with a bluish liquor which seemed to emit little sparks when agitated. Could it turn iron to gold? My head was fairly dizzy with the thought. I must try."

"Taking it over to the brick hearth, I opened it, and poured a few drops on an ax which I had brought in to use in demolishing the chimney. Instantly a steaming vapor arose, sending off a tremendous heat. The helve was burned up in the twinkling of an eye, and I jumped back in amazement. By the time I looked again, an ax of gold lay in place of the iron, and the brick was powdered half an inch deep."

"As soon as the ax could be examined, and I satisfied myself that it really had been changed, I went wild. Everything in the house that was of iron I speedily brought and made over into gold. So eager was I that I did not notice the liquid until I realized that it was all expended. What a fool I had been not to husband it! Yet not altogether, for scattered about was a fortune in gold, which I gazed upon while resting for a few minutes."

"Now, there isn't any use in drawing this story out, as you have the main fact. I concealed the gold—my gift from the ghostly arm—and afterward turned it into securities through the proper channels."

"The finish is given in a word. I was a rich man. Mr. Atherton was a willing father-in-law, and I have the loveliest wife in the world. You are both invited to dine with me to-morrow evening, and enjoy her welcome to my friends."

A short pause followed the conclusion of Middleton's story. Then Jarvis said, "That's a very interesting way to tell us how you won your wife by making money, but, er—"

"Well?"

"That's just it," broke in Masters. "When we remember how you used to spin yarns, you know—"

"Gentlemen," interrupted Middleton, "all I ask you to believe is that the man who resolutely sets to work for a legitimate purpose will receive assistance beyond himself."

### What a Small Boy Can Do

We mentioned in our last issue about a little girl that read about FARM AND FIRESIDE going to get a million subscribers. She wanted to help FARM AND FIRESIDE. In a short time she had a nice club ready to send. A boy about twelve years old sent a club of ten. If all FARM AND FIRESIDE boys and girls would do as well as these, wouldn't FARM AND FIRESIDE hum? Let's all turn in and help. See how many new subscriptions you can get to FARM AND FIRESIDE at twenty-five cents a year. In the meantime write to FARM AND FIRESIDE, and ask how much cash you may retain for doing this.



## Marian's Motor-Plow

BY MAUDE E. SMITH HYMERS

"THERE'S no use, Marian, it's coming faster, so we might as well give up," gasped Mr. Reed, as his daughter passed him with her arms full of stove-wood.

Marian paused to look toward the rapidly flushing sky. The forest behind them was on fire, and the wind was steadily licking it toward them. In a moment it would be feeding on the piled wood with which they were working.

"And let the fire devour all this wood?" she cried. "Oh, we can't, we can't!" and desperately she struggled on.

For hours they had worked together, rapidly, fiercely, in a brave attempt to outwit the fire. Again and again they had shifted the rows of corded stove-wood seasoning for the winter's market, each time a few rods nearer to safety. But they could feel that the fire was gaining headway. The forest back of their little farm was full of smoke and flying cinders, and the few faint breezes that reached them were growing more and more heated.

"Come on, child; after all, it's only a woodpile. We may be thankful that the house and buildings are safe," said Mr. Reed, remonstratingly, as with feverish determination Marian kept at work.

"But it isn't only a woodpile—it's money!" she cried. "It is more than that, for it means eyesight for mother. We will never be able to pay for the operation from the crops, and we had hoped so much from this wood. Oh, we must save it!"

Her determination inspired the father, and for a while they worked on again feverishly. Marian's face was tense and pale, her hair disheveled, her hands torn and bleeding. Her father, too, was well-nigh spent, his eyes smarting from the smoke.

"Just a few rods further, father. If we could only get it to the edge of this plowed field," cried Marian, as he paused.

"We can't make it, Marian. It's almost here now," he said, as a hot breath fanned his cheek.

Marian groaned. "Oh, if the horses had only stayed by us! If somehow we could plow a space between the wood and the fire we could save it even yet, couldn't we, father?"

"Yes; but God knows where they are now, for they'll never stop running as long as they smell the fire. If only some of the neighbors were passing they would come in and help us."

In a spasm of renewed hope Marian scrambled to the top of the woodpile, and shading her eyes with her hand, looked off down the valley. A little red speck gleamed faintly in the road a mile or so away.

"Where are you going, child?" called her father; but Marian was running furiously down the lane toward the house, her hair tossed backward on the wind.

That gleam of red on the road—she had seen it pass going in the direction from which it was now coming just before the fire was discovered. It was an automobile, and instantly a strange plan took root in Marian's brain. It must pass their house soon—if she could only reach the road by the time it arrived there. She stumbled in her mad haste, but with a little gasping cry she sprang up and struggled on again. The plow—the wood! Oh, she must save the wood for her mother's sake!

Leo Challis brought his auto to a sharp standstill almost upon the girl. For a moment a fierce anger scorched him, for she had deliberately thrown herself in his way, and such recklessness was criminal! But before he could put his anger into words, she was up and tugging open the heavy farm-yard gate through which she had come.

"This way!" she cried. "Please, oh, please come this way!"

Challis stared a moment, but her white, eager face appealed to him. With a gesture of assent he paused beside her, reaching out a hand to assist her to the seat beside him.

"Tell me all about it," he said, soothingly, steering the machine smoothly up the wide lane.

"The fire!" she cried. "It's in the timber, and papa's cord-wood will all be burned!"

"But I can't—" he began, vaguely.

"And the horses are gone, so we couldn't plow around it," she continued.

In a flash he understood; the eager purpose in her face had communicated itself to him. "Where's the plow?" was all he said, as he pulled the lever hard over and sent the machine leaping ahead.

"In the field just beyond. There's father now," she cried, catching sight of the bent form.

Mr. Reed, thinking Marian had despaired of saving the wood, had himself given it up, and started disconsolately toward the house.

"Go back, father," called Marian, clearly; "go back and get the plow ready."

They reached it about the same time, and Mr. Reed was quickly made acquainted with their plan. Swiftly they worked, and soon the field-plow was attached to the rear of the motor-car.

Then was illustrated the most progressive ideas in plowing up to date. Mr. Reed, guiding the plow-handles, followed the plow, which cut through the unbroken wood-sod as easily as a knife cuts cheese. Challis at the lever held the machine down to accommodate the plow, but even at the slowest possible pace Mr. Reed had almost to run to follow it. At last it was over, and the machine stopped with a final mighty throb, while Mr. Reed staggered to the ground exhausted.

But they had won in the race with fire. The corded wood was protected by a space of freshly turned sod, and the little company on the opposite side watched the sheet of fire sweep toward them threateningly, only to fall back in impotent wrath as it encountered the freshly turned sod.

Now that it was over, Challis had time to observe the girl, who, from her loving task of bathing her father's heated face, smiled up at him wanly. The dark hair, though tumbled, was picturesque, the face pale, but sweetly attractive, and Challis thanked the luck that brought him to the farm just in the nick of time.

"You saved the wood for us. We are ever so grateful, Mr.—" she began, then paused in embarrassment.

"My name is Challis," he said, quietly. "I am only too glad to be of service to you, but it was really you who saved the wood. I should never have thought of so clever a plan."

"But ideas don't count without the wherewithal to carry them out, so with all my planning we couldn't have saved the wood without you. And it isn't altogether the wood, you know," she broke off, impulsively. "It means so much for mother. She is almost blind now, and the doctors think an operation will save her sight; but operations cost money, and that is what you have saved for us," she finished, the expressive face alive with feeling.

Challis' heart quickened its beating. "Not I, for I alone could have done little. It is the auto which deserves our gratitude. And it has paid for itself a thousand times this afternoon."

"I never liked the noisy things before, but I shall always love them hereafter," she said, impulsively; then at the expression in his eyes, for some reason she blushed.

This was the first time Leo Challis ever drove an automobile to drag a plow, but it was not the last time his machine found its way to the gateway of the Reed farm; and when he and Marian were married a year later, the same machine carried them away on their wedding journey.

Mr. Reed, who is fond of telling the story of Marian's motor-plow, invariably adds, "That was the liveliest span of horses I ever held a plow for."

## Nature and Science

**THE IRON SANDS OF JAVA.**—A curious sight on the coast of Java is a long stretch of shore, about twenty-nine miles in length, where the sand is filled with particles of magnetic iron. In some places it is said that the surface sand contains eighty per cent of iron. It can be smelted, and a company has been formed to exploit the deposits.

**AMERICAN RADIUM.**—The chief source of radium is pitch-blende, a European mineral, but lately it has been found that an American mineral from Utah, carnotite, yields sufficient radium to make it a practicable source from which to obtain that substance. The activity of radium from carbonate is said, however, to be inferior to that obtained from pitch-blende. Professor Curie, the discoverer of radium, has said that some excellent radio-active pitch-blende had come to him from Colorado.

**SURVEYING THE SEA-BOTTOM.**—From a balloon shallow places in the ocean and rocks rising near to the surface can be seen much more clearly than from the shore or from shipboard. For this reason the French naval engineer, Renaud, suggests that a captive balloon would be a most useful accessory to a marine surveying-ship. With such a balloon dangerous waters having shallow areas and bottoms intersected with narrow and tortuous channels could be rapidly charted both by eye observations and by the aid of photographs taken from the balloon. Of course, soundings would still be necessary to ascertain the exact depth of water, but these would be greatly facilitated by the knowledge previously gained through the aid of the balloon.—Youth's Companion.

Have you renewed your subscription to FARM AND FIRESIDE for another year? If not, now is the time to do it. It will help you out of many difficulties this summer.

## THE HOUSEKEEPER'S PROBLEM

## THE FACTS OF THE CASE

THE tendency of the times is for young women to prefer work in office or factory rather than doing housework. Yet the work in the office or factory is usually more nerve-racking, because it is a constant repetition of work at high speed—a tension which racks brain and body, and from which there is no relaxation. On the other hand, the house-



part of wisdom to confide in an ignorant person without medical education simply because she was a woman. There is every reason why she should write to a specialist, particularly to one who has made the diseases of women a specialty for a third of a century, like Dr. R. V. Pierce, founder of the Invalids' Hotel and Surgical Institute, of Buffalo, N. Y. All his correspondence is held sacredly confidential, and he gives his advice free and without charge.

Many are confined to a continual indoor life because of disease of the womanly organs. To these is offered \$500 reward if they cannot be cured of Leucorrhea, Female Weakness, Prolapsus, or Falling of Womb. All Dr. Pierce asks is a fair and reasonable trial of his means of cure.

No other medicine for the cure of woman's peculiar ailments is backed by such a remarkable guarantee as Dr. Pierce's Favorite Prescription. No other medicine for woman's ills is possessed of the unparalleled curative properties that would warrant its makers in publishing such an offer; no other remedy has such a record of a third of a century of cures on which to base such a remarkable offer.

"I must tell you what wonderful medicines your 'Golden Medical Discovery' and 'Favorite Prescription' are," writes Mrs. Nora Anderson, of Vandergrift, Westmoreland County, Pa. "These remedies have done wonders for me. I was as thoroughly run down and worked out a woman as ever lived, and in fact contemplated suicide at different times. It would be impossible for me to describe my sufferings so you could understand all. I had such bearing-down pains; felt almost as though approaching confinement. Would bloat across abdomen, and it seemed as though a heavy pressure was there. I suffered untold agony; had also pains from small of back down in each groin, severe pains

through hips almost as severe as labor pains; in fact, words can hardly express what I suffered. Head would ache till it seemed it would burst. I would have black spots above my eyes; face would be dark-spotted, and my stomach would bloat dreadfully. At last I took to my bed. Was not able to do anything for a week. Soreness in womb was so severe that if I stepped on my feet would almost scream with pain. Kidneys were so bad; bladder seemed to be full all the time. Our doctor said that I had inflammation of womb and kidneys. He gave me some tablets to kill the pain. Oh, how I did suffer! I can never tell you all. I sent for a bottle of Dr. Pierce's Golden Medical Discovery, and one of his 'Favorite Prescription,' also some of his 'Pleasant Pellets,' and took these remedies according to directions. Now I am on my second bottle of each, and feel a great deal better than for five years previous to trying these medicines. If I can only find money to continue I will become hearty and strong. I have tried other patent medicines, but none ever did me any good. I am indeed thankful to God for putting it in my mind to try Dr. Pierce's medicines.

"I will gladly answer any lady who may wish to inquire as to the truth of my statement. May God's richest blessings be with you and yours."

## HOW TO KEEP YOUTH AND BEAUTY

Every woman, young or old, should know herself. To arrive at this knowledge, secure a good doctor-book by addressing Dr. R. V. Pierce, Buffalo, N. Y. "The People's Common Sense Medical Adviser" can be procured by sending twenty-one cents in one-cent stamps for paper-bound volume, or thirty-one stamps for a cloth-bound copy.

## Reader, We Want Help

That is, we want coöperation. That will make the old family favorite, FARM AND FIRESIDE, boom. This is how we want to boom it: FARM AND FIRESIDE has about a million readers, and we want each one to send us just one new subscription to FARM AND FIRESIDE at twenty-five cents a year. That's only a little from each, but a whole lot when it is all added together. That would be a real boom, and it's so easy if each one will help. Please don't wait.

Our new Pattern Catalogue of spring and summer styles is ready to mail, and may be had for the asking. A postal-card will bring it to you. Send for it to-day.

## CONFIDE IN A MAN

When a woman has ills and pains she cannot bear—when life seems dark for every woman—she should confide her troubles to a physician of standing in the community, or one who has a national reputation. Certainly it would not be the



AN ELEGANT REPRODUCTION OF A

# Magnificent Painting

**FREE** to any one sending TWO yearly subscriptions to Farm and Fireside at the regular price, 25 cents a year.

This handsome picture is reproduced in ten colors and gold, and all the tints and colorings of the original painting are carefully preserved and brought out.

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. IT IS FRESH FROM THE ARTIST'S BRUSH, AND NEVER BEFORE OFFERED TO THE PUBLIC, so that Farm and Fireside readers have the first opportunity to secure a copy.



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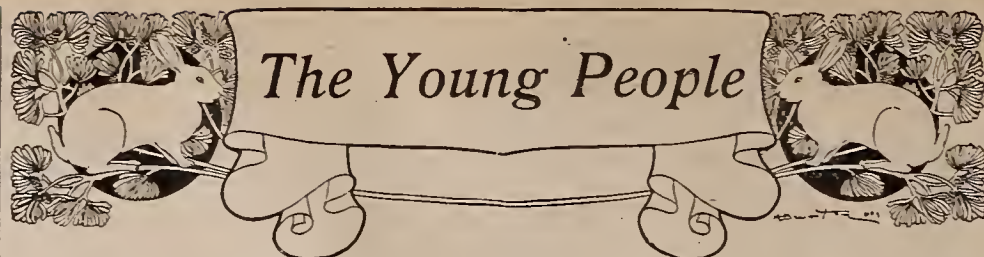
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The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. **Order as No. 54.**

One of these handsome pictures, and Farm and Fireside one year, will be sent to any address for only 40 cents.

Address FARM AND FIRESIDE, Springfield, Ohio



## Millie May's Easter Party

**M**ILLIE MAY's birthday that year came on the Saturday before Easter Sunday, and when thinking about the party her mother always gave her she decided it would be fine to have some Easter eggs in it, so she asked Mrs. May if she couldn't plan it that way. After a little thought her mother said she could, and then they went to work together. They live on the outskirts of a lovely Southern village, and as Mrs. May looked thoughtfully away while she was planning, a great idea came to her. The dogwood-trees were already white with blossoms, and the soft wind brought to her the sweet breath of the yellow jasmine.

"How would you like to have a picnic party, my dear?" she asked. "If the weather continues as mild as it is now we could have a little dinner over yonder on Squirrel Ridge, and it would be more fun than a little to have a real hunt for your eggs about in the grass and under the pretty trees."

Millie agreed joyously, and as the day was less than a week ahead, they began at once to prepare for it. Millie told her mother the names of all the girls she wanted—just as many as she was years old—and then she gathered some fine smooth magnolia-leaves for the invitations to be written upon. After Mrs. May had written them with gilt ink, Mil-

lie brought out the eggs they had been saving for so long, and Mrs. May showed them how to use the dyes and how to make the rabbits and chickens and brownies. She told them how, when she was a little girl, she had to dye her eggs by sewing them up in bits of bright-colored calico, and Grandma May said she had dyed hers yellow by boiling them with broom-sedge, and purple by sewing some iris-petals in with them; but Auntie Kittie said nothing at all, but gathered up her water-colors, and went away by herself for a little while. When she came back she brought ten eggs painted like funny little children with caps and buttoned jackets, and some of them were laughing, some crying, and one was a queer little picture of Millie herself. She explained that these were to be souvenirs that the little girls could carry home and keep, as she had blown the shells before she painted them. For the little brother, Teddy, who had been so helpful, there was one with a picture of old Robinson Crusoe with his funny cap. When one o'clock came, Mr. May harnessed up the two great farm-horses, and filled a wagon half full of straw. Then Millie and Teddy and mama got in, and they went from house to house, gathering up the girls.

All knew too much to believe that the bunnies laid the Easter eggs, so they decided that they would hide one egg



MILLIE MAY AND HER BROTHER

lie tied a dogwood-blossom and a little spray of yellow jasmine to the stem of each leaf, put them in a basket lined with gray moss, and sent them out by her little brother. Then every afternoon after school her mother would show her how to make something for the picnic-basket. First it was some nice little cakes that she could pack away to get better with age, and then it was how to pound and season some meat for sandwiches, and when Friday came it was how to make a dressing for some salad that she was to make Saturday morning. Millie said it was a "ravellied out" birthday, for she was having the fun of it so long beforehand. Saturday morning she and her

at a time, and let whoever found that be "it," and hide the next one.

Then they looked and looked, but there were only six found when Mrs. May called them to lunch. It was spread on the ground under the dogwoods, and Mrs. May had made a gypsy-kettle off to one side, where the pot was hung for the water to boil for their tea, which they had in little new tin cups with a name painted on each, and the luncheon was bountiful and dainty. After supper they searched for the eggs, finding only a part of them, and then the merry party drove gaily home, all well pleased with Millie May's Easter party.

SUSIE BOUCHELLE WIGHT.



## The Young People

Something New in April Jokes

"I'm so dead tired of all the old ways of making April fools I won't try a single one of them this year," said Nana. "Last time I got Cinda to put cotton batting in the breakfast-cakes, and then I poured clear vinegar into Ted's glass in place of water, and the folks didn't like it at all; and that afternoon mother sent me to bed at three o'clock because I pinned a duster-rag to Miss Polly Perkins' coat when she was calling. Everybody will be watching me this time, and it is no use for me to try to catch anybody."

"That is the trouble about any kind of a record, Nana," remarked Auntie Rose. "We are always expected to live up to our reputations. Still, my dear, you have a fine chance to spring all sorts of surprises on your family and friends."

"I don't see how," pouted the little girl.

"Well, listen, then." Auntie Rose talked for a good while in a low tone, and Nana jumped up with brightening eyes when she had finished.

On the morning of the first of April the Glover family partook very delicately of the breakfast which faithful old Cinda had set before them. By each plate lay a daintily wrapped parcel, directed in Nana's best vertical hand, and the fact that there was a pink, a violet or a pansy thrust beneath the fastenings of pretty green satin ribbon didn't allay the suspicion that some hideous antipathy in the way of bugs, worms or toads was concealed within.

"April fool, Nana!" cried Ted, as the last individual left the table and all the little parcels lay untouched.

"A-p-r-i-l F-o-o-l, every one of you!" she retorted, slipping into her apron-pocket another package directed to her chum. "You are all afraid to look in my boxes!"

"Come back here, Nana!" called her father, just as she was closing the hall door; but with a backward glance and a laugh, she ran on down to the gate. He had very gingerly opened the package addressed to him. Within lay one cigar of his favorite brand, and his little daughter's card. Just above her name she had written, "Your April surprise—I will not chew gum any more."

Mrs. Glover found her box full of flower-seed, and one written line lay across the top—"I will try to stop saying things." It was very indefinite, but the mother understood, and smiled tenderly.

Grandma's box held just one spool of white thread, upon which all the needles from a whole paper had been threaded, and the dear old lady read through her spectacles, "When these are not the kind you want, I'll thread the others without a fuss."

"Bless the darling," cried Grandma. "I always knew she wasn't half as naughty as some people said she was."

"Yes'm, I'm afraid she is about to be transplanted—I mean translated," said Ted, whose suspicions had died hard, but who now was busy fumbling with the ribbons of his own box.

"Well, maybe not yet awhile," he laughed, for when he got into it he saw nothing but "Good-morning, Mr. April Fool" written in bold characters across the card in the bottom of the box.

He had thrown the box aside, when Auntie Rose said, merrily, "Mr. April Fool, that box is not as empty as it looks," and then he picked it up and examined it. Sure enough, it had a false bottom fitted snugly in, and between the two was a bright new silver quarter.

That afternoon Nana accepted Grandma's invitation to come over, though she feared she would be expected to read aloud, which she hated; but when she reached the gate she saw an open carriage standing at the gate, and father and Ted sat in it, holding in check the two pawing shiny black horses.

"Here is your April Fool, dearie," said Grandma Glover, who was coming down the walk with a covered basket in her hand. "I only sent for you to go driving from here to-day. To-morrow you can come and read to me, if you will."

She was like the others, afraid to open her basket for a good while; but when she did, she found the nicest kind of a little lunch packed in it.

"It is just as much fun as the other way," confessed a tired, sleepy little maid, as she snuggled down into Auntie Rose's arms that night. "I didn't think they would be as much surprised as they were—and going out to the river is a pretty good deal better than going to bed at three o'clock." Mrs. H. W.

Spring and summer styles for 1904 are portrayed in our new Pattern Catalogue. Send for it to-day.



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the "Little Doctor" in the home, regulate the general health. They purify the blood, strengthen and invigorate the digestive organs, **give vim and tone to the nerves,** and put the whole body in a thoroughly healthy condition.

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## Save Your Daughter

No. 185 West 88th Street,  
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Wine of Cardui has been a blessing to my home. I have often found that it was a great relief when I was weary or in pain, but I am especially grateful for what it did for our daughter and only child. I noticed that her menses were tardy and she suffered with headaches and giddiness, heaviness in the abdomen and about the loins. This seriously interfered with her studies and she had to discontinue several of them.

A visitor calling on me and discussing the matter suggested that I give her a course of your Wine of Cardui as it had relieved her daughter of a similar trouble. After my daughter had used it for five weeks I found a great improvement in her looks, health and behavior, in fact she was a different girl. The flow became regular and we have not had any difficulty since.

*Lizzie H. Thompson*

TREASURER, RATHBONE MEMORIAL ASSOCIATION.

# WINE of CARDUI

Here the menstrual function had not been properly started and the unnatural condition was making the young girl an invalid. The headaches and giddiness, indicated something more than a mere temporary ailment. They were symptoms of a functional weakness which would become more and more aggravated as years went by. But Mrs. Thompson was ready to take advice for her daughter's welfare and she gave the little sufferer Wine of Cardui and now she is a well young woman.

If your daughter is sickly and frequently ailing the letter of this good mother contains the best advice you can follow.

Wine of Cardui is the menstrual regulator that cures nine cases out of every ten. Young girls, mothers and aged women find this tonic indispensable.

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## Figure a Little On the Future.

more hands to develop the country. Briefly the condition is this: The Southwest is really in need of nothing save people. More men are wanted. In the Southwest are vast areas of unimproved land—land not yielding the crops of which it is capable. The same thing, in a different way, is true of the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and manufacturing plants, for small stores of all kinds, for banks, newspapers and lumber yards. Mechanics and professional men, both are in demand. Tell us what you want, how much you have to invest, and we'll help you with information about a good opening.

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## The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

### Post-Office Addresses

A. S. L., Kansas, asks for post-office addresses of inquirers.

We do not keep queries, and therefore are unable to give information.

### Fortune in Denmark

L. O. E., Minnesota, asks: "If a relative died in Denmark about fifteen years ago, and left some money, would it be too late for relatives here to get it now?"

I don't know. Address the American consul at Copenhagen, Denmark.

### Lease of Land

E. B. R., Kansas, asks: "Can A. lease his land to B., and then after B. has possession of the land release to another? Is it unlawful? If so, what is the fine?"

If B. is in possession under his lease, he could hold it. If he is put out, he must sue A. It is a civil matter, and there is no fine to be collected.

### Right to Divorce

J. M. F., Nebraska, inquires: "My father married a widow in Iowa twenty-six years ago, and they separated, she receiving her share of the property. He went to Kansas, took a homestead, and willed it to his son direct. Could she come in now for any share of the estate? She never was a resident of the state of Kansas."

If the parties were never legally separated, the wife would still probably have a life estate in one third of the real estate.

### Patentable Article

N. S. S., Oklahoma, says: "It is a general opinion among people that any person has a right to make a patented article, provided it be solely for his own use. Is this the case?"

A person has no right to make for his own use any article which he knows to be patented. It is the duty of the patentee to mark his article "Patented." If he does not do so, he can recover no damage, unless he otherwise gives notice that it is patented. If a person was making an article before it was patented he would not be liable.

### Fence Along Farm Outlet

J. M., Missouri, asks: "A. owns a tract of land, and B. and C. own tracts of land joining A. on the north. In going back and forth from home to the main county road, B. and C. have to pass through A.'s land on a by-road. It has been a by-road for thirty years, and A. has to keep up two lines of fence along it to fence in his stock. A. has to make these two lines of fence to accommodate B. and C., as A. does not care to stop B. and C. from passing through his land. By law, ought B. and C. be made to build one, or even both, lines of fence along the by-road as long as B. and C. have the privilege of passing through A.'s land?"

Most assuredly B. and C. ought at least to keep up one of these fences, and such is the statute law in Ohio. I am not advised as to the statute in Missouri.

### Homestead Land

V. L. W., Texas, inquires: "A married man filed on a homestead in Texas, had it surveyed, and after the required time (three years in Texas) made all proofs and sent them to the land commissioners at Austin. The land commissioners acknowledged same, but said no field-notes had been received showing that there is such land. The matter rested for a few years, the parties moved away to work for a living, and in 1901 they separated. There is one child, which the law gives to the wife. The woman married again, and she, with other parties having homestead in a near strip of vacant land, had the land run out by a special surveyor. She paid for same herself, and sent in the required sum (five dollars) for patent on advice of a lawyer that she could get half the land; but the lawyer now says she cannot get any of it because the patent is in her former husband's name, having been issued since the divorce was granted. Can she get half, or can her former husband dispose of it without a deed from her? The child is still living with the mother."

It seems to me that neither you nor your former husband has any right to the land. If you have, the courts will have to settle it. If you can show that your former husband had a property right before the divorce was granted, there is no doubt that you can receive some portion of it.

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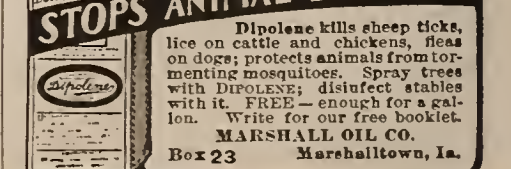
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## The Family Physician

By R. B. HOUSE, M.D.

## Diet in Chronic Constipation

**C**HRONIC constipation and its effects afflict a large percentage of the people of this world. The diet being fully as important as any other part of the treatment in constipation prompts me to quote the following excellent suggestions regarding the diet in constipation from Cohen's "System of Physiologic Therapeutics":

"In order to produce peristalsis it is essential that the intestines contain a certain bulk of fecal matter. A diet rich in meat and eggs and the sparing use of vegetables, fruits and water will produce a small residue of undigested matter; therefore the intestines will fill very slowly to a point sufficient to provoke vigorous peristalsis. When such a diet is habitual to a patient it should be changed. Vegetables, fruits, coarse breads and water should be taken freely. These foods should contain a large amount of cellulose, which remains undigested, fills the intestine, and excites in it peristaltic activity. The vegetables that are most laxative are tomatoes, spinach, lettuce, asparagus, Spanish onions, sal-sify, cabbage and celery. Spinach and tomatoes are especially prized for their effect upon the bowels. The coarse cereals have the same reputation. Oatmeal, corn-meal and wheaten grits are the best. Bread made of coarse flour, such as Graham, rye, corn, oats and 'whole-wheat' meal, also help to prevent and to relieve constipation. Bran bread is especially efficacious. It is made by adding bran to ordinary flour in as large a proportion as is compatible with the making of good bread. Such breads as gingerbread and Boston brown bread are also laxative, but often cannot be used because they provoke gastric indigestion.

"Honey, molasses, and food eaten with them, are also reputed useful for the relief of constipation. Honey has been used in all ages as a mild laxative. Many persons are sensible of the stimulation of peristalsis that coffee produces. The addition to it of much sugar and cream will sometimes retard gastric digestion, and may thus counteract its stimulating effect upon the bowel. Fruits have a laxative influence, partly because of the sugar they contain, partly because of the fruit acids, and sometimes because of their irritating skins and seeds. Berries—strawberries, blackberries, raspberries, blueberries, gooseberries—currants and grapes are effective, partly because of their seeds and partly because of the acids that they contain or that are generated during digestion.

"Apples, pears, peaches, plums, cherries, oranges and grape-fruit are chiefly purgative because of their sugar and fruit acids. Prunes, figs, raisins and dates have besides these either a skin or seeds, that act as local irritants in the intestines. Fruit produces the greatest laxative effect when eaten alone. It is therefore best taken at bedtime, and on rising—half an hour, or better an hour, before breakfast. A compote with meals will do good, although it is not so effective as fruit taken upon an empty stomach. Apple-butter, date-butter, marmalades and similar preparations are often eaten upon bread or crackers.

"Many who are constipated fail to drink enough fluids either to keep the contents of the intestines soft or to form intestinal secretions as abundantly as is needful. This is especially true of those who lead a sedentary life, and of women. If upon inquiry it is found that enough water is not habitually taken, more must be prescribed.

"Slight constipation may often be relieved by a glass of cold water the first thing in the morning. The laxative effect is enhanced if another is taken at bedtime. The morning draught stimulates peristalsis and secretion. Under its influence the rectum is slowly filled, and half an hour or an hour later breakfast provokes the desire to defecate. The habitual use of hard water is constipating unless magnesium and sodium sulphates occur with the lime-salts in sufficient quantities to make it laxative. Distilled water or soft water has a neutral action. Water containing much organic matter frequently provokes diarrhea. An average-sized man should drink from five to eight glasses daily. Sweet cider is loosening to the bowels. Grape-juice if taken freely acts similarly. Tea is an astringent, especially when made by boiling or prolonged leaching of the leaves. Tea-drinking is not an uncommon cause of constipation."

Make your spring and summer clothes at home. You can do so if you use our patterns. Our new Pattern Catalogue shows all that is new and best in the latest styles. Send a postal-card for it.

# We Shall Spend \$500,000 To Give Liquozone Away

This Company, after testing Liquozone for two years in the most difficult germ diseases, paid \$100,000 for the American rights. That is the highest price ever paid for similar rights on any scientific discovery.

We are now spending \$500,000 to give the product away—one bottle to each of a million sick ones. We are doing this so that every sick one may let Liquozone itself prove what it can do.

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The greatest value of Liquozone lies in the fact that it kills germs in the body without killing the tissues, too. And no man knows another way to do it. Any drug that kills germs is a poison, and it cannot be taken internally. Medicine is almost helpless in any germ disease, as every physician knows.

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Liquozone is the result of a process which, for more than 20 years, has been the constant subject of scientific and chemical research. Its virtues are derived solely from gas, made in large part from the best oxygen producers. By a process requiring immense apparatus and 14 days' time, these gases are made part of the liquid product.

The result is a product that does what oxygen does. Oxygen gas, as you know, is the very source of vitality, the most essential element of life. Liquozone is a vitalizing tonic with which no other known product can compare. Yet it is a germicide so certain that we publish on every bottle an offer of \$1,000 for a disease germ that it cannot kill.

The reason is that germs are vegetables; and Liquozone, which—like oxygen—is life to an animal, is deadly to vegetal matter. It is carried by the blood to every cell of every tissue, and no touch of impurity, no germ of disease, can exist where Liquozone goes.

## Germ Diseases

These are the known germ diseases. All that medicine can do for these troubles is to help Nature overcome the germs, and such results are indirect and uncertain. Liquozone kills the germs, wherever they are, and the results are inevitable. By destroying the cause of the trouble, it invariably ends the disease, and forever.

Asthma  
Abscess—Anemia  
Bronchitis  
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Bright's Disease  
Bowel Troubles  
Coughs—Colds  
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Constipation  
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Dysentery—Diarrhea  
Dandruff—Dropsy

Hay Fever—Influenza  
Kidney Diseases  
La Grippe  
Leucorrhea  
Liver Troubles  
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Many Heart Troubles  
Piles—Pneumonia  
Pleurisy—Quinsy  
Rheumatism  
Skin Diseases  
Scrofula—Syphilis  
Stomach Troubles

Dyspepsia  
Eczema—Erysipelas  
Fevers—Gall Stones  
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Throat Troubles  
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Women's Diseases

All diseases that begin with fever—all inflammation—all catarrh—all contagious diseases—all the results of impure or poisonous blood.

In nervous debility Liquozone acts as a vitalizer, accomplishing what no drugs can do.

## 50c. Bottle Free

If you need Liquozone, and have never tried it, please send us this coupon. We will then mail you an order on your local druggist for a full-sized bottle, and we will pay your druggist ourselves for it. This is our free gift, made to convince you; to show you what Liquozone is, and what it can do. In justice to yourself, please accept it to-day, for it places you under no obligation whatever.

Liquozone costs 50c. and \$1.

## CUT OUT THIS COUPON

for this offer may not appear again. Fill out the blanks and mail it to the Liquid Ozone Co., 458-460 Wabash Ave., Chicago.

My disease is.....  
I have never tried Liquozone, but if you will supply me a 50c. bottle free I will take it.

S-4 Give full address—write plainly.

Any physician or hospital not yet using Liquozone will be gladly supplied for a test.

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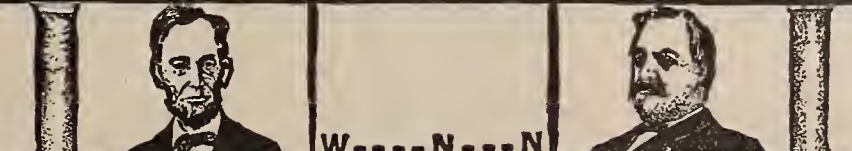
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## Wit and Humor

### Fowl Play

FRIENDS and fellow-citizens," began Rooster Bill, in a sonorous cackle, from the top rail of the barn-yard fence, to his assembled audience below, "we stand upon the eve of a revolution. (Rooster Bill was quite an orator when occasion demanded.) From time immemorial our ancestors and ourselves have submitted to the yoke of a cruel tyrant. Year after year the fowler of our flock have been taken from us. For what purpose? For what purpose? I demand! You all know—merely to

continued Shanghai Mike, not deigning to notice the imputation.

"You're a traitor!" crowed Rooster Bill.

"You're a liar!" was Shanghai Mike's inelegant response.

And then and there Rooster Bill sustained his reputation as the worthy leader of a worthy cause. Descending from his perch, he waded into Shanghai Mike for gore and glory. The fight was as short-lived as the Spanish resistance in Manila Bay. Shanghai Mike retreated under the barn with a limp to his gait, a good deal of his plumage remaining on the field of battle.

"We will now continue the discussion," announced Rooster Bill a moment later, as he regained his position on the top rail, a trifle flustered, but still the same old Bill. "There is but one effective remedy for our ills," he cackled, decisively. "When the mothers of our flock are once again called upon to hatch a brood of children, let them break every egg set beneath them. This will—"

Just then Melinda, the help, appeared upon the scene with a basket of corn and a hurried disbandment followed.

A few weeks later Farmer Brown stood talking with his hired man in the barn-yard. "I can't understand what ails those chickens," he confessed, in a troubled tone. "I've set at least a dozen hens lately, and they've smashed every egg put under them. I wonder what's got into the critters. You've no idea, John, have you?"

The hired man was forced to confess his ignorance on the subject.

"I've been thinking about cutting the flock down a few," continued Farmer Brown. "The hen-house seems to be pretty full just now," he added, reflectively. "And there's one I've had my eye on for some time!" he exclaimed suddenly, singling out a big rooster. "That fellow with the big plume in his tail," he designated with his finger. "He's been fighting every rooster on the place, and a few weeks ago he nearly killed one. I wonder why the hens tag after him all the time. I'll bet he's as tough as Job's turkey." The thought made him chuckle.



ROOSTER BILL

gratify the cannibal appetite of that monster known as man. Where are our stalwart sons and beautiful daughters to-day—the pride of our roosts? Where are they? I ask you! Gone! Gone! Barbecued and stewed, and their bones cast to the dogs. Are we deserving of this treatment—this wholesale slaughter of innocents? No; a thousand times, no! Who provides this creature with the eggs he eats and sells? We do! That is, the ladies do," corrected Rooster Bill hastily, with a bow of homage toward the feminine members that set them fluttering with delight. "But the time for action has come!" declaimed Rooster Bill, heroically, fiercely ruffling his feathers and proudly cresting his crimson comb. "We must rebel—with bravery—and refute for all time the charges made against us that we are chicken-hearted!"

"Hear! hear!" cackled the flock.

"Who but the mothers of the flock can best appreciate the sacrifices that we have been forced to suffer?" continued Rooster Bill, after the demonstration had subsided. "There is Mrs. Plymouth Rock, a worthy member of our family. Perhaps she will favor us with a few words."

"Our noble leader honors me," clucked Mrs. Plymouth Rock, in a gratified tone. "I have suffered, it is true, but no more than the other mothers of the flock. Time and time again have my children been torn from my side, and cruelly beheaded before my very eyes. But I cannot bear to speak of it. My heart bleeds for them—my emotion overcomes me." And Mrs. Plymouth Rock sadly bowed her head in sorrow and despair.

"This is all nonsense!" exclaimed Shanghai Mike, a gentleman of high degree, who had joined the flock but a few days before. "Why should we complain? Are we not well housed, and do we not get enough to eat? Let the younger members of the flock take care of themselves. If they get killed, that's their own funeral. We older members are safe by reason of our age—"

"And toughness!" chimed in a saucy little bantam youngster.

"By reason of our age and dignity,"

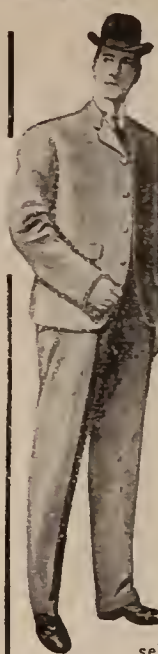


MRS. PLYMOUTH ROCK

The following day Mrs. Plymouth Rock balanced herself upon the top rail of the barn-yard fence, and addressed the assembled flock. "Friends and fellow-citizens," she began, in the late words of a departed hero, "the greatest loss in the history of our flock has come to us. Our great leader, Rooster Bill, has met his death. The cruel hand that has murdered our children in the past has descended upon his noble neck. Never, never will we see his like again!"

"Poor Bill!" cackled the flock, in dolorous chorus. H. WHITTIER FREES.

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## Wit and Humor

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Then take some subject like the summer skies,  
Or fleecy clouds, or sunny Southern climes;  
Having done this, it's ten-case notes to dimes  
You'll ring in something sweet about the eyes  
Of her whom you regard as just your size.  
I've done it, too—perhaps a hundred times.  
Well, only six lines left to stumble through—  
Now only five—so simple, don't you think?  
Who ever said the Muse was hard to woo?  
She's pretty soft for me—too bad I drink.  
I'm done already. Isn't it just bliss  
To draw a salary for doing this?  
—William F. Kirk, in the Milwaukee Sentinel.

### His Only Regret

"AREN'T you glad now that you didn't succeed in getting silver at 16 to 1?" asked the stranger.  
The Populist leaned on his rake, and looked doubtful. "Can't jest say that I am," he replied at last.  
"But this country is prosperous, ain't it?"  
"Oh, yes, that's all right; but I was allus cur'ous to know what 'u'd happen if we got silver, an' it don't look like I'd ever find out."—Chicago Post.

### His Little All

It is a pity to spoil a good moral, but it is sometimes done when a story is excavated to its foundations. This story from the London "Outlook" is, however, good enough to stand on its own feet:  
"When I came to town, twenty years ago," said a prosperous man of ample waistcoat, "all my earthly possessions were wrapped up in a red bandanna handkerchief."  
"And now you own three hundred acres of land and that factory on the edge of the town?"  
"Yes."  
"May I ask you what you carried in the red bandanna handkerchief?"  
"Six thousand pounds in cash and bonds."—Youth's Companion.

### No Accident

A London paper tells a story of a certain short-sighted sportsman. He was asked one morning by a fellow-sojourner in a small hotel on the shores of Loch Carron what sport he had had.  
"Just seen a seal," he said. "Shot at it three times, and missed it each time."  
At dinner, an hour later, he sat next to a man with a bandage around his head. "Accident?" he inquired.  
"Accident?" was the indignant response. "Attempted murder, you mean! I was having a bathe about an hour ago, when some lunatic fired at me three times from the shore, and shot part of my ear off!"  
"Wonder who it could have been," murmured the sportsman, and changed the conversation to the Japanese war.—New York Tribune.

### Too Busy to Make a Noise

A Kansas City teacher of a kindergarten was incapacitated from work one day last week by the following incident:  
The subject of the lecture and object-lesson was animals, birds, and then more animals.  
"Now, children," said the teacher, "I want each of you to think of some animal or bird, and try for a moment to be like the particular one you are thinking about, and make the same kind of noises they are in the habit of making."  
Here was the command. Here the finale:  
Instantly the school-room became a menagerie. Lions roaring, dogs barking, birds singing and twittering, cows lowing, calves bleating, cats meowing, etc., all in an uproar and excitement—all, with one single exception. Off in a remote corner a little fellow was sitting perfectly still, apparently indifferent and unmindful of all the rest. The teacher observing him, approached, and said, "Waldo, why are you not taking part with the other children?"  
Waving her off with a deprecating hand and wide, rebuking eyes, he fervently whispered, "Sh—sh—sh, teacher—sh! I'm a 'ooster. an' I'm a-layin' a aig!"—Kansas City Star.

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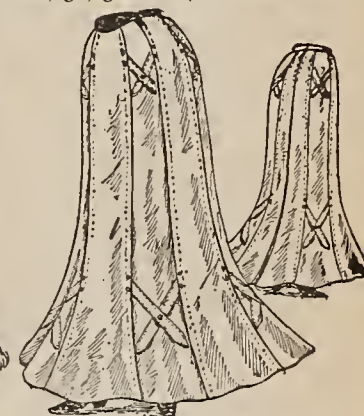


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## Miscellany

### Largest Vessel in the World

THE White Star line, celebrated for eclipsing records as regards size of steamers, launched on November 21st, from Harland & Wolff's yard at Belfast, another vessel, the "Baltic," which exceeds even those great leviathans, the "Celtic" and "Cedric," now running in the Atlantic trade. The "Baltic" is the largest and in many respects the finest vessel afloat, her great size making it possible to add improvements even beyond the other vessels of this type, in which the ship-builders' art has already attained such a high standard of excellence. The dimensions of the "Baltic" are as follows: Length, seven hundred and twenty-five feet nine inches; breadth, seventy-five feet; depth, forty-nine feet. Her gross tonnage will be nearly twenty-four thousand, her capacity for cargo about twenty-eight thousand tons, and the displacement at her load draft about forty thousand tons. The new vessel will be fitted with accommodation upon the same lines as that in the "Celtic" and "Cedric," but even more commodious than in those vessels. The general arrangements of the ship will be similar to the two other vessels of this type—a continuous shade-deck running fore and aft, with three tiers of deck-houses and two promenade-decks above same. On the upper promenade-deck will be the first-class smoking-room and library, and the two houses below will contain the deck state-rooms. The first-class dining-saloon will be on the upper deck, and all the first-class accommodation amidships. Immediately abaft the first-class will be the second-class accommodation, and there will be also a comfortable smoking-room and library for this class of passengers. The third-class passengers will be provided for abaft the second-class, and to a limited extent at the fore end of the vessel. A great feature in this accommodation will be the large number of state-rooms—two, three and four berth—and the commodious and comfortable dining-rooms, fitted with tables and revolving chairs. There will be accommodation in all for nearly three thousand passengers, besides quarters for a crew of about three hundred and fifty. In addition to the ordinary state-rooms there will be suites consisting of bed, sitting and bath rooms; also single-berth state-rooms—a new feature. Then, the exceptional and well-distributed strength of the structure of the vessel, in addition to the water-tight subdivision, have secured the maximum of safety obtainable. As in the other large steamers of this type, one of the most notable features in the "Baltic" will be the grand dining-saloon—a very handsome apartment. Situated on the upper deck, it will extend the full width of the ship—seventy-five feet. It will be exceptionally lofty and airy, and it will contain seating accommodation for three hundred and seventy people. There will be large refrigerating-chambers for the carriage of chilled beef. The "Baltic" will be fitted with engines of Harland & Wolff's quadruple-expansion type, about thirteen thousand indicated horse-power, and the speed will be about sixteen and one half to seventeen knots. The engines are arranged on the "balance" principle, which practically does away with vibration. The tonnage of the White Star fleet now amounts to the huge total of nearly three hundred and fifty thousand tons. It consists of twenty-nine steamers, of which twenty-five are fitted with twin screws, and possesses no fewer than twenty-one vessels of over ten thousand tons each, including three of over twenty thousand, one of seventeen thousand and two over fifteen thousand tons.—Liverpool (England) Daily Post.

### Forcing the Egg Product

When my birds are yarded or housed for winter I feed three times a day. In the morning I feed grain, one quart to ten or twelve birds, scattering it over the straw and chaff upon the floor, which should be five or six inches deep, the grain being well forked into the litter. It is best to use a variety of grains alternately, such as wheat, oats, barley, buckwheat and cracked corn.

At noon I feed cut clover and vegetables, such as mangels, turnips, potatoes, cabbage, etc., and at night all the mash they will eat. This mash is composed of finely cut clover, corn-meal, coarse bran, brown middlings, buckwheat middlings, gluten-meal and meat-meal. These are all thoroughly mixed together dry, and then made into a mash with boiling water, with a little salt dissolved in it. The old theory was to feed mash in the morning and grain at noon and night.

Realizing the need of an abundance of

exercise for the birds in the winter-time, I saw that by changing the program I could get my birds to do better, and could feed heavier without danger from overfeeding. Feeding the warm mash on a cold morning, the birds would fill up their crops, get up on their perch, and sit and shiver, while in feeding the small grain in the morning they get off the perch, go right to scratching and hustling for their breakfast, warm up their blood, start circulation and keep themselves strong and healthy. This theory I found would work out all right in practice, as my birds did not get too fat and lazy, as they were very apt to do when they were fed in the old way. I feed the grain and vegetables, and then at night give them all the mash they can be induced to eat, of foods high in protein—that is, easily digested while they are at rest—and it has never failed to produce a good, heavy yield of eggs.

The birds must be watched, and care taken that the grain be all cleaned out of the litter each day; if they do not clean up their usual heavy feed of mash in the evening, cut down on the grain ration next morning, so as to have them always hungry for the evening mash.

Be sure that they have some kind of good, sharp grit, such as mica crystals, oyster-shells, etc., and good fresh water always before them in abundance. I believe that much of the poultry on the farms do not lay in the winter because of the lack of good, fresh, warm water. Many of the farmers never stop to think that their poultry need any water, but when they are led to think and to realize that an egg is two thirds water they will soon see that hens cannot lay eggs without water.—J. Y. Patton.

### The Hobby of Independence

Too often because of our fear of being thought a burden to others we deny ourselves pleasures when our acceptance would give happiness to those for whom we would willingly do anything or deny ourselves even the necessities of life. To illustrate, a friend of mine told me of a trip she would like to take, and said that her mother and brother were anxious she should, and that her brother would gladly give or loan her the money, but she was "too independent" to accept; and as she had not the money of her own just then, she would give up the journey.

She was apparently laboring under the impression that she was cultivating the saintly virtue of self-denial instead of more firmly rooting the vice of selfishness; but instead of winning approval and commiseration, her decision was adversely criticized, and an earnest and persistent effort was made to open her eyes to its true perspective.

The pleasure she would derive from her trip would be more than duplicated to her mother and brother in that they were instrumental in her receiving it, and the pleasure she could afford them upon her return by a lively recounting of the many pleasant incidents and happenings of her journey with the skilful leaving out of those things unpleasant would more than compensate for the money gift that made this happiness possible.

Understand that her going would not result in hardship for any of her family, and all that prevented her acceptance of their kindness was her hobby "independence." All hobbies are meant to be ridden, but it is a pity that some should be ridden to death. The average American working-girl gives generously to her family and friends both of herself and her means, and she surely should be considerate and thoughtful enough to accept as generously and whole-heartedly as she gives. The "Do unto others" applies as well in accepting as in giving.—L. W. W.

### Year of Calamities

The modern astrologers, soothsayers and "prophets" concurred in the statement that the year 1904 would be one of many terrible calamities. The record so far seems to bear them out. Whether any specific prophecies will be verified remains to be seen. One is that Japan will humble the Russian bear. W.

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if you think there is something to be sold that you really need and can pay for. When you are there, speak to your neighbor friends about FARM AND FIRESIDE, and see how large a club of subscribers you can send. It is only twenty-five cents a year, and comes twice a month. We want every reader of FARM AND FIRESIDE to interest himself in the paper's welfare and help build up the list. We would like each reader to send just one new subscription in addition to his own. Will you please help?

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## Farm News-Notes

**B**UTTER-MAKING is profitable in Siberia because the largest money value is returned for the smallest bulk in shipment. This is a good example of the need of condensing farm products and lessening freight-charges.

The general government of the Dominion of Canada has a system of distribution of pedigreed seeds. Each farmer can have enough of either spring wheat, oats, barley or Indian corn to seed one twentieth of an acre.

Prof. James King, of England, in an article entitled "Flavor and Aroma," says: "In England the owners of Guernsey and Jersey cattle claim that the butter from their milk is of superior flavor, owing to its high color."

Good seed-corn is likely to be scarce. The best way is to get corn in the ear that was selected in the fall and well dried. If cribbed corn must be used, it should be well tested to determine its vitality before planting-time arrives.

About fifteen thousand refrigerating-cars are constantly required to convey fresh meats from the leading Western killing-points to Eastern markets. This indicates the magnitude of the fresh-meat industry in the United States.

Nearly half a century ago the farmers in Holland began to realize that dairying was more profitable than grain-growing. This invariably proves to be the case as the density of the population increases. Holland now imports as much grain as she grows.

It is estimated that there are six hundred kinds of weeds and grasses growing in the Mississippi Valley. Sheep eat five hundred and fifty kinds, horses eighty-two, and cattle fifty-six kinds. Keep at least twenty-five sheep on each one-hundred-and-sixty-acre farm. It will pay in many ways.

Try the more frequent setting of orchards and intercropping with the least soil-exhausting crops. The old way of once planting for a lifetime supply will never do. Cultivate the orchard as you would any other crop, and see that the soil is supplied with the food which the trees and fruit need.

The Alphonso mango of Bombay, grown upon grafted trees, is the most delicious fruit known to man. It has the flavor of the ripe peach, apple and pear combined. The season opens in May and June, and the first of the fruit to ripen sells readily at five shillings a dozen. In England the fruit sells at twelve to eighteen shillings a dozen.

There is not only pleasure, but profit, in originating and introducing new varieties of orchard and garden products. A "special" from London announces that four pounds of a disease-resisting variety of potato, the Eldorado, brought three thousand dollars. The grower refused an offer of three hundred and fifty dollars for a single potato of this variety.

Grain-growers will be pleased to know that Mr. Robert B. Armstrong, Assistant Secretary of the Treasury, has authorized the seizure of twine imported into the United States that does not contain six hundred feet to the pound. It is reported that American farmers have heretofore suffered much loss for lack of enforcement of the law by collectors of customs.

In order to excel, if possible, the excellent work being done at the University of Illinois in the interest of progressive agriculture, the University of Missouri has recently established a full course of study and practice in poultry-raising. The annual income from the poultry industry in Missouri is estimated at over ten million dollars, making it hardly second in importance to the dairy interest.

### Boys and Girls, Earn Cash

FARM AND FIRESIDE is determined to greatly increase the number of its subscribers. The price has been reduced to only twenty-five cents a year. We want boys and girls everywhere to get up clubs at this popular price. It is easy to do. We pay you cash for your work. You can do it at spare times. You will be surprised at the money you can earn. Write to-day for terms, and while you are waiting for an answer get up a club. Address FARM AND FIRESIDE, Springfield, Ohio.



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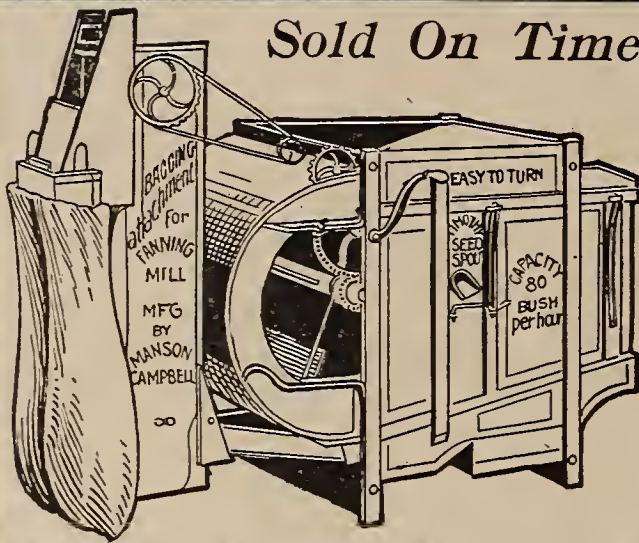
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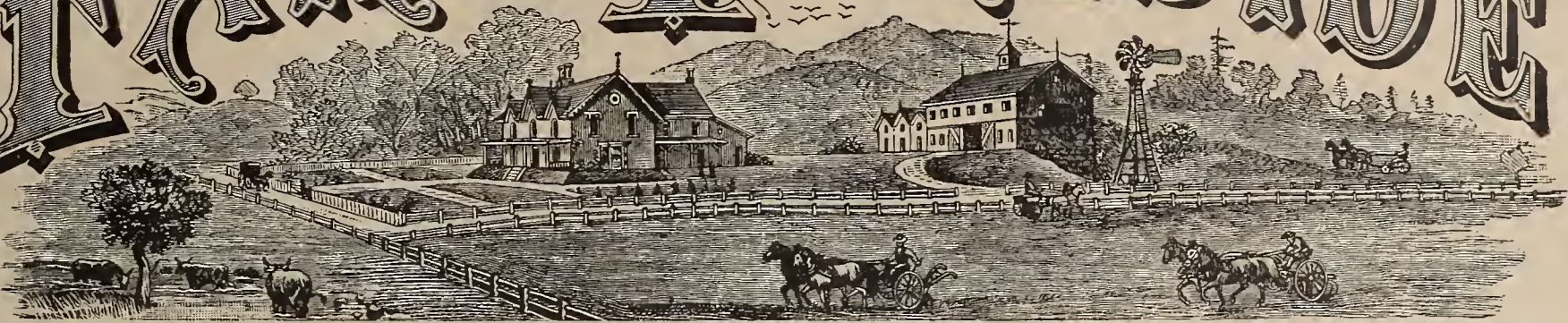
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# FARM AND FIRESIDE



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## "Bringing Up" Peach-Trees

By WALTER E. ANDREWS

**M**OST persons will admit that the first year is a critical period in a youngster's life. What is true of the child is likewise true of the tree—both must be "brought up" correctly during that trying first season, else death or enfeeblement results.

I live in the "peach belt" of Michigan, where hundreds of men make a business of bringing up thousands of peach-trees to a profitable maturity; and from the accumulated horticultural wisdom of many successful lives I shall endeavor to condense into printed form the "training" rules which have proved best.

Let us begin with a baby tree direct from the nursery. Of course, strictly speaking, the first year of a peach-tree's life is ordinarily passed in some nursery away from the average orchardist's control. But that is immaterial. The nurseryman is supposed to know his business—and he usually does. Therefore, so far as the orchardist's responsibility is concerned, a tree's first year begins at the time when he buys the tree and gets it home.

In the latitude of Michigan the best time to set a peach-tree is in early April. Fall setting is not desirable in this instance. The land can be cleared and plowed in the fall, however; then, as soon as severe cold weather is over in the spring everything is in readiness for setting. Experienced planters order their nursery trees sufficiently early to secure early delivery, and when the trees come they are "heeled in"—that is, inclined in a slanting direction, with the roots well covered with moist dirt—until time for setting.



A NEWLY SET PEACH-TREE

that the roots are spread out uniformly all around in the hole, not bunched together on one or two sides. Shovel in the dirt, topsoil first. Tramp down firmly with the feet when hole is half filled, then shovel in balance of dirt, and tramp down again.

Next take your pruning-shears (which ought to be in your pocket), and cut off the entire top of the baby tree at a point two and one half feet from the ground. You may dislike to do it, or you may think, dubiously, "Why, that will just about ruin my tree—there will be nothing left but a whip and perhaps two or three side-branches." Cut it off, nevertheless, and do it fearlessly. Experience has proved the value of this course beyond the possibility of doubt. Cut off, too, any side-branches which may still remain on the "whip." These should be severed at a point about an inch from the main stem, leaving not more than one or two buds on each branch.

That is all. Your tree is now started, and if you have been careful to secure thrifty, live, well-rooted stock you will be surprised at the rapidity with which a new top will be formed. In sandy soils climbing cutworms sometimes do damage to newly set trees by eating out the buds before they have time to start. If these worms prove troublesome, the best preventive is a three-inch band of tar-paper set into the ground around the tree-trunk,

but not touching it. This paper circle should project about two inches above the ground-surface, and be about the same distance away from the tree-trunk. Strange to say, cutworms will not cross such a circle.

All peach-trees need cultivation from May to August. The ground should be kept loose and mellow by running a cultivator or harrow over the surface every ten days. Shallow cultivation is best. Plow

"up" to the tree-rows one spring, "away" from the rows the next spring, and so on. Look to the drainage. If necessary, tile the land. Peach-trees will not endure wet feet, nor low-lying, frosty locations. At the last cultivation in August sow oats or crimson clover (or a combination of both) for a winter cover-crop to be plowed under in the spring.

But to return to your newly set tree. Watch it carefully, and when the new shoots are nicely started and have grown to a length of an inch or so you should begin to train the tree. Select four or five well-placed shoots radiating in all directions. Rub off all other shoots. In selecting this basis for future branches you should endeavor to choose shoots which start from different places on the tree-trunk, thus obviating so far as possible unnecessary crotches and the resulting storm-damage. (One of the illustrations shows a badly started, or crotched, tree.) Aim, too, to have the most shoots on the side of the tree from which prevailing high winds come. These winds will do their best to push the tree backward, and therefore every possible precaution should be taken to offset that attempt. No other pruning is required the first season, except to occasionally rub off any surplus shoots which may start from the tree-trunk.

Considerable pruning will be necessary the second spring. Cut out surplus branches and all branches pointing inwards. Strive to make the tree "spread out" into a round, stocky, symmetrical head. Cut back any branches which have outstripped their fellows. Don't be afraid of pruning too much. A peach-tree needs a large portion of its growth removed every year. After the first year or so it is usually necessary to "head back" the tree, as well as to thin it out.

"When the sappy boughs  
Attire themselves with blooms, sweet rudiments  
Of future harvest."



NEWLY SET TREE PRUNED

Now for the operation of setting. Peach-trees should not be set closer together than eighteen feet each way—twenty feet is better. Dig a hole sufficiently large to hold the tree's roots comfortably, first trimming off any broken or damaged roots. Set the tree deep enough to cover the "joint" (the union where the tree was budded), and incline the trunk slightly toward the direction of prevailing winds. See



AFTER THE SECOND SPRING

### A Héarty Response

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Always give your post-office at the beginning of your letter.

## Mr. Greiner Says:

**RYE FOR HUMUS**.—A reader would like to know whether rye sown in the fall and plowed under in the spring will bring a sufficient quantity of humus into the soil to pay for the transaction. I am not sure of this. My experience is that a half-grown crop of rye plowed under has very little effect and value as a soil-improver. In order to get humus enough to pay for sowing rye, the latter should be left to get nearly its full growth before it is plowed under. This can be done for late potatoes, and it would probably have the additional desirable effect of keeping the crop free from scab.

**NOW, AS THE SPRAYING-SEASON** is close upon us, a reminder in regard to the quality of the lime to be used in the preparation of the Bordeaux mixture may be timely and perhaps useful. We have had lots of trouble from the nozzles getting clogged up with sediment from poor lime. A bulletin of the experiment station of Vermont (No. 243—"Spray Mixtures and Spray Machinery"), speaking of the importance of lime properly slaked, says: "The lime should be fresh, clean and firm. In slaking, the best results were obtained by adding at first only a small amount of water, preferably hot, and then as slaking begins adding cold water in small amounts as needed, never adding much at a time, and never allowing the lime to become dry. When too much water is added, small lumps of lime are apt to be covered and remain unslaked. When the lime is fully slaked, it should be fully diluted by adding water slowly while stirring." When I caution my friends against the use of any but the very best lime for the purposes here considered, I know whereof I speak. Gritty sediment in the Bordeaux mixture is often a terribly annoying thing.

**GARDENING FOR QUALITY**.—Possibly we may make our home gardens mainly with the idea of getting supplies for the kitchen and table. There is another side to this, however, which has always appeared to me of paramount importance. I have often referred to this phase as "gardening for morality." Mr. Chas. Garfield, of Michigan, some time ago spoke of it as "gardening for character." Professor Bailey, in the introduction to a beautifully gotten up work, "How to Make a Flower Garden," says the home garden is for the affections and for quality. His remarks are so much in line with my own ideas and teachings that I am tempted to quote the following paragraph: "Even the fruit-garden and the vegetable-garden are also for the affections. One can buy ordinary fruits and vegetables—it never pays, to grow them in the home garden. When you want something superior, you must grow it, or else buy it at an advanced price directly from some one who grows for quality and not for quantity. If you want the very choicest and the most personal products, almost necessarily you must grow them. The value of these things cannot be measured in money. The commercial gardener may grow what the market wants, and the market wants chiefly what is cheap and good-looking. The home gardener should grow what the market cannot supply, else the home garden is not worth the while." I find a heap more satisfaction in the consciousness of having better things from my own garden than I could possibly buy rather than in the mere fact of being abundantly supplied with garden produce.

**ONE SEASON NO TEST**.—"One swallow does not make a summer." The results of one season's test of fruits, vegetables or anything else can never be considered conclusive. Mr. J. J. H. Gregory warns against allowing our selection of tomato varieties to be influenced by the results obtained in our experiments of last season with new varieties of tomatoes. I wish to extend the application of this suggestion to a number of other things. The last two seasons have been somewhat out of the ordinary—abnormally unfavorable for the best development of heat-loving plants. Our tomatoes did fairly well, and comparatively much better than egg-plants, melons, and even soy-beans. Some who have made first trials with egg-plants in the Northern states may conclude that the crop does not succeed so far north. Many who were led to plant soy-beans in 1902 and 1903, and to expect great things from them, were disappointed, and possibly disgusted with the crop. Yet the results another year are liable to be entirely different and highly satisfactory. With soy-beans, cow-peas, alfalfa, etc., there is still another factor which plays an important part. These plants, to do their full part and their best, need certain soil-bacteria. If these are absent, the plants will at first do poorly, but will improve the second season, as the particular bacteria are produced and increase, and afterward will produce their full crops. We must give every plant or variety a chance before we condemn it.

**FERTILIZERS FOR POTATOES**.—A reader in Providence, R. I., asks a number of questions about fertilizers for potatoes. First, he wants to know what fertilizer is best to go with hen-manure. We know that the potato needs a considerable amount of potash. In a ton of the clear droppings of well-fed fowls we have about sixteen or seventeen pounds of potash and just about twice as many pounds each of phosphoric acid and nitrogen. Now, provided the soil contains a good portion of clay and an abundance of potash, a few tons of hen-manure spread over an acre of potato-ground would in all probability alone be sufficient to give a material increase of yield. Soils of a lighter (sandy) character are more liable to need potash, and the best fertilizer to go with the hen-manure in such a case would therefore be potash in some form, perhaps as wood-ashes, or as muriate or sulphate of potash. The wood-ashes are most safely applied separately, broadcast on the surface, and well mixed with the soil by means of harrow or cultivators. Muriate of potash, which costs about forty-five dollars a ton, may be applied in a wide band over the furrows or trenches just before planting. I usually open the furrow with the furrowing attachment of my single-horse wheel-hoe, then scatter the muriate so it will reach over the ridges on both sides, finally go a second time with the furrowing attachment in the bottom of the furrow, and then drop the seed-pieces and cover them. South Carolina rock contains phosphoric acid and no other plant-food. It costs eleven to fourteen dollars a ton, and has about that many per cent of water-soluble phosphoric acid. Nitrate of soda will hardly be needed when hen-manure is used freely.

**FRUIT AND HEALTH**.—While I am thoroughly impressed with the importance and healthfulness of a fruit and vegetable diet, I do not despise meats, such as good beef, home-grown pork, fish, poultry, eggs, etc., believing that both go well together, and that good meats, when well digested, have a tendency to furnish strength, energy, nerve-power, while the fruits, etc., will counteract the bad effects, if there are any, of a free diet. Two facts seem to be well settled. One is that meat furnishes a most excellent home and nourishment for bacteria. Bacteriologists know that beef-extract, for instance, is one of the best substances in which to propagate bacteria. Doctor Kellogg reports in "Good Health" that the recent examination of the fluids of sixteen thousand stomachs showed that the germs which infest the stomach could not be made to grow in fruit-juice, and that fruit-juice would not support germ life. "No germs could be found alive in the fruit-juices after a few hours. They would grow in the extract of grains, though not very vigorously, but in beef-tea the most deadly and virulent germs flourish luxuriantly." Appendicitis has become one of the great scourges of the country. For a long time the lodgment of grape or other fruit seeds was thought to be the first cause of this trouble. Now it is known that the cause is an inflammation brought on, not by the eating of fruits, but by excessive indulgence in meats. Among people who live almost wholly on fruits and cereals appendicitis is almost an unknown disease. For myself, I put a good deal of reliance for health and general well-being on the free use of fruits and fruit-juices, especially fresh or canned grape-juice, currants, strawberries, pineapples, hot lemonades, etc., and I believe that in these things we have far more potent medicines and tonics than any we can buy in our drug-stores.

## Mr. Grundy Says:

**LABOR AND FUEL PROBLEM**.—Three coal-miners have taken me to task for what I said in the FARM AND FIRESIDE of March 1st about their demands for more pay and shorter days. As one of them is abusive, we will pay no attention to him; but the others write so pleasantly that one cannot help feeling that there is considerable to say on their side. All of them dodge one part of the matter I spoke of, and that is their determination to allow no one to take their places when they strike. Not far from where I live the miners struck, and the operators decided to bring in miners from other sections. When these arrived there was a battle, some were killed, and a general reign of terror was inaugurated. It seemed that the operators were determined to beat the strikers out, and the miners were just as determined that they should not. Both sides were unfortunate in having hot-headed fool leaders who would listen to nothing

in the way of compromise or concessions. Now, where did the farmers of this particular locality come in? They had to have fuel, and there was an abundance of it close by; but the miners would not allow anybody to get it out, because they said that such action would open the mines, and that could not be permitted under any circumstances. The result was that the farmers were compelled to haul their coal a distance of fifteen or twenty miles.

There is no question that the work of mining coal is hard, disagreeable, and often dangerous, and it would seem that the miners are not getting a fair share of the price the consumer has to pay for it. The mines are only twelve miles from this locality, yet we have to pay twelve cents a bushel for all the coal we buy. Last fall I laid in eight tons, and it cost me just the same as if I had laid in only one bushel—that is, twelve cents a bushel. The high price has led to the economizing of fuel in every possible way. One farmer had all the siding taken off his house, a lining of ship-lap put on the studding, that covered with heavy building-paper, and the siding put on over it. Storm-windows and double doors were put in, and instead of a regular coal-heater he has installed a great sheet-iron heater that burns all sorts of trash. He is now burning less than half as much coal as formerly. Probably this is about the shortest and one of the best methods of cutting down the coal-bills. In the meantime, however, it is a good idea to be looking after that wood-lot. It is not likely that the troubles between miners and operators are going to end very soon, and I am looking for another great strike in the near future, to be followed by others until some other method of managing the coal-producing business is adopted. The coal-consuming public has been patient and long-suffering, but a few more extensive strikes will surely bring about some forced changes in the matter of coal-production. These changes may come soon, and they may be delayed for years; but until they do come the danger of having our fuel supplies cut off will always hang over us.

**SPROUTING GARDEN-SEEDS**.—I am glad spring is here, for it is much more pleasant to talk about farm, orchard and garden work than about strikes and labor troubles. Sometimes I find that I have forgotten to plant the seeds of some variety of vegetable, or we have two or three weeks of rather dry weather just when we need little showers almost every day, and seeds lie in the soil quite a long time before sprouting, and there is a break in the regular supplies of garden-stuff. In such cases as these I have found it a good idea to sprout the seeds before planting them. I put the seeds in water that is quite warm (not hot), and keep it warm until the sprouts begin to appear. Then I mark out the rows, and get things ready, pour the water off the seeds, and with the point of my knife take up two or three seeds at a time, and place them where I want them. The planting is always done in the evening. A light covering of soil is put on, the bed or row well sprinkled with water, and single thicknesses of newspaper laid over it and weighted down by drawing soil on the edges. These papers are left on until the plants appear, then they are removed in the evening. The rows should be lightly raked the following day, to prevent the soil from baking and cracking. By sprouting the seeds, especially of such vegetables as beets and onions, one can get the plants up from a week to ten days earlier than if the seeds are put directly in the ground dry. I have also hurried radish and lettuce seed by sprouting them before planting. Watermelon-seed I always sprout in a small box of soil placed under the stove. Last year I did not get my melons that were started in a box set out until May, and then I had melons two weeks before my neighbors, who planted dry seed in the ground earlier.

**SPRING CHICKENS**.—"A Farmer's Wife," living in Indiana, asks whether I think it best to feed very young chickens a dry food or a damp mash. I would feed the dry food, by all means. I have raised a great many chickens, and have always had better success with dry food than with any kind of mash or dampened food. There are two things that I have entirely quit feeding to chickens—one of them is a damp mash, and the other is green cut bone. Both of these foods have had their day. Green cut bone is a very good condiment for grown fowls, but it must be fed sparingly. A little too much is sure to affect them unfavorably. In warm weather it spoils quickly, and then it is the next thing to poison. Little chickens are ravenously fond of it, and a spoonful will set a whole brooderful of them wild. There is a good deal of tommyrot written and printed about raising chickens. One should take most of it with caution. It is not the early hatched chicken that is most profitable, though many would like to make us think so. The very early hatched chicken is like the greenhouse tomato—it costs so much to grow it that it must be sold for an exceedingly fancy price to make it profitable. If the fancy price is not forthcoming, the grower is out of pocket. Of the thousands of chickens I have raised, the most profitable ones were those hatched in April, May and June. They were the most profitable because most easily and cheaply raised. I consider May the best month in the year for chicken-hatching. Days are warm, nights are mild, and there is an abundance of just the kind of green food that chicks thrive on. Give a young chick plenty of sunshine, plenty of young grass and clover, plenty of clean water and grit, and plenty of dry broken grains and seeds, and it will grow like a weed. It will grow two or three times as fast as the winter-hatched chicken, and is more than twice as good to eat. A wealthy gentleman who is quite an epicure said to me, "Those brooder-broilers do not taste right. I do not like them. Give me the broiler that is raised in the sunshine on a carpet of clover—there is a delicious morsel for you!" And this opinion is shared by a great many people. The winter broiler can be successfully raised only in quarters especially arranged for it, the same as winter cucumbers, tomatoes, roses, etc., and it is the height of folly for any one to attempt to raise them without these fixtures. I would advise "Farmer's Wife" and all other farm people to stick to "spring chickens," "roasters" and eggs if they want to make their hens pay.



## Farm Theory and Practice

**A** QUARREL AMONG SCIENTISTS.—Last fall the now famous "Bulletin No. 22," treating on soil-fertility, was issued by the national Department of Agriculture. It was written by a Professor Cameron, but had the full indorsement of Professor Whitney, who is chief of the Bureau of Soils and a widely known authority. This bulletin supported the "Whitney doctrine" that soils would have little or no need of manures or other fertilizers if the physical condition of these soils could be kept good. But it seemed to go further than any preceding department bulletin on this subject, and to teach that the use of commercial fertilizers to supply plant-food is not advisable or necessary. The critics of this view have gone after the author and department sharply, holding that the position taken in this bulletin is not correct, and is sure to mislead and to bring the Department of Agriculture into disrepute.

Finally the Bureau of Soils is not able to bear the criticism in silence, and in the last number of "Science" the author of the bulletin replies to Professor Hopkins and others. He claims that the critics' "statements are not in accord with the facts," and that the inaccuracies are purposely stated. He seeks to convey the impression that the Bureau of Soils recognizes value in commercial fertilizers. But nothing that the author can say will change the fact that the chief of the national government's Bureau of Soils has consistently antagonized for many years the idea that commercial fertilizers are needed in most soils as a direct source of plant-food. He has held that the apparent effect of applications of chemicals was probably due to their effect upon the physical condition of the soil, and that we could secure this improvement to our advantage in other ways. Such has been the trend of the teaching, and not the slightest doubt about the opinion of the department scientists could exist.

**THE EFFECT OF THE CONTENTION.**—One effect of this discussion is to convince those of us who are owners of land and dependent upon it for income that our scientists do not yet know very much about the actual operations in the soil when plants are getting their material for growth. They investigate and speculate, but in considerable degree the land remains a closed book. This is most unfortunate for us, but it is none the less true. The day may come when we shall know definitely about the soil in relation to a growing plant, and can treat the land scientifically and with surety that we do not waste money in the production of crops, but so far we are in the dark about many things. It results that we should stay close to the time-tried means of getting crops while causing land to increase in productiveness—the use of all the manure we can make on the farm, the use of clover and other legumes, good tillage, and such fertilizers as help us to good sods and plenty of humus.

**THINGS WE KNOW.**—While the scientists argue, the practical farmer knows that fields do not remain productive when the supply of humus in the land is allowed to run low. The soil may have the soluble fertility in it, as Professor Whitney affirms, to produce many, many crops; but if the crops will not come, the knowledge has no cash value to us. We know well enough that moisture is a controlling factor in regulating yields, but experience has shown that we cannot control the water-supply in the soil simply by cultivation. Cornell University tried that on the potato crop, and after a few years it admitted that organic matter in the soil was a necessity. We have land that will not grow this material without the use of commercial fertilizers, and hence their use is justified to that extent, at least. In fact, anything that helps to clover or other legumes is a benefit to land, no matter what theories may be found good or bad.

**OUR LIMIT TO FERTILIZERS.**—I wish that our scientists could tell us the exact effect upon the soil of the various fertilizers, and some day they may be able to do so; but in the meantime we have found that we may get results on some land from their use, and no results on other land, and that we must test them for ourselves. And we are learning that while an effect may be good on a crop, the land may not be left in desirable condition. An illustration is found in Professor Thorne's tests with acidulated phosphates. He has shown that while the yield of a crop may be increased by the use of acid phosphate, some land so fertilized will become unfriendly to clover. Apparently it is brought to an acid condition that will not promote the growth of clover. Such facts have inestimable value in guiding us in our own tests in our fields.

Again, we know by experience that an increase of crop due to the use of commercial fertilizers tempts to too much cropping with cash crops, or those removed from the field, and to less dependence upon humus-making plants. When the fertilizer is used heavily, a fair yield of any crop may continue for years, because the stock of available fertility is large; but the reduction of humus, and possibly some unfriendly chemical changes in the soil, lead to bad soil-conditions that are not easily overcome.

## All Over the Farm

On the other hand, where stable manure and clover are used freely it would seem that large applications of commercial fertilizers of high grade may not injure the land. Knowing how little is really understood about the soil, we move cautiously along tested lines, not expecting that scientists can advise with certainty on all points. This is yet an age of elementary investigation.

DAVID.

## The Golden Kernel

Some one, nobody knows who, has told us that bread is the staff of life. If that is so, the grain before it is made into bread is the life itself. Corn and wheat are in fact the life of the world. Take them away, and the earth and its nations would suffer a revolution.

More and more care is being taken in growing these grains as we come to understand their relation to the life of the people. The study of the corn-plant alone is one of deep interest. Just now it is absorbing the attention of an army of men all over the country.

A few weeks ago I took a little trip through a certain section of the country where the snow had gone, leaving the earth bare. The old corn-stalks showed where the rows of last year's crop had been. It was interesting to note the difference presented by these long rows of dry stalks in different localities. Some were poor, slender things, showing that the man who gathered the crop from them last fall had hardly enough to pay for the work, while others, by their size and thrifty appearance even then, when the snows of winter had rested on them, indicated a bountiful harvest. What made that difference? The men behind the crop, and only the men. Where the crop was slender and the returns meager, men had been lax; and where there had been a splendid harvest, just as surely as day follows night, so surely there had been thorough men at work.

What is the secret of the corn-plant? I have tried hard to find it, and believe it is right here:

Plow the fertilizer under. Why? Because the corn-roots run deep. Did you ever try to trace one down to its source? If not, do it some day, and you will be surprised to know how far down the little roots will creep. This will show why the manure should be deeply covered, where the rain will not wash it away or the air steal it, so that it may be saved up for the day when the corn-plant needs it to mature its golden kernels.

Then, reduce the soil to the very best condition before planting. It is easier to kill weeds at that time than any other. Very often we think we have not the time to do a good job with the harrow. The days are pressing, and time is short, but an extra half-day now may save five or six later when it comes to cultivating.

And again, a nice top-dressing of hen-manure, if you have it or if it can be procured, placed near the

stored for future use or for sale. One of the first important principles of good dairying is that the cows shall not get hungry; a second is that the cost of the ration must be kept down to the minimum. Therefore, against hunger and against heavy feeding of grain or purchased feeds or expensive hay it is wise to always have some crops growing that may be drawn upon to meet short-feed emergencies, and now is the time to plan for them.

Most of our successful dairymen feed more or less supplementary feeds even while the cows are on good pasture, for the double purpose of conserving pasture and keeping all the demands of bodily nutrition and production supplied. The shrinking of the milk-flow is invidious, it comes unawares, and it comes to stay. It may be warded off by sufficient feeding, but no amount of good feeding can profitably increase the flow that has been allowed to materially shrink. The cheapest method of supplying these supplementary feeds is from supplies grown on the farm. Probably the most ideally perfect method is from the silo, but unless the silo was filled last year with that object in view it is not an available source from which to supply next summer's needs, and we must turn to those crops that may be planted in the spring and be depended upon to work quickly for us. If one is so fortunate as to have rye and crimson clover growing now, he is well fortified against early demands. After crimson clover, red clover and timothy will fill the gap until the time of oats and Canada peas, sown, two bushels of each to the acre, as early in the spring as the ground may be worked. Ten days after the first sowing a second should be made, and if the ground has become well warmed, generous plantings of early sugar-corn, Evergreen sugar-corn, early field-corn and the later-maturing large-foddered kinds. All the corn-planting may be done at one time if desired, and the different habits of growth will make a good succession.

After rye, corn may be planted. After crimson clover, corn or cow-peas or soy-beans. After oats and peas, cow-peas or sugar-corn. After first sugar-corn, a second crop, drilled in between the rows cut off, and planted as rapidly as the other is removed, or a few days ahead if desired. Sugar-corn in southern Pennsylvania may be planted up until July 4th, as may cow-peas and buckwheat, also. Avoid summer plowing as much as possible. For the second crop the land can usually be better and more cheaply prepared with harrow or disk. Be liberal with manure or chemicals, with seed and acreage. Any crop mentioned that is not needed for green feeding will make good hay or stover.

Feed liberally of all these crops, and let no time of absence of some of them come. The most likely gap comes after clover and timothy, and before oats and peas. When the corn is old enough, it is plain sailing if one has been wise enough to plant plenty of corn.

This arrangement all seems simple and easy enough,

but the one who has never tried it and is anxious for the most good from his dairy will take my advice and plan now. A summer silo will simplify and cheapen it all wonderfully, and is better.

W. F. McSPARRAN.

## Liming Soils

Probably at least one farmer out of every four has practised or experimented at some time with liming his soil. In some sections of the country liming is a very general practice, while in others it is rarely heard of. Lime is well recognized as a corrective of sour soils, but it has also been largely used and experimented with as a fertilizer. Except in limestone regions, it is as likely to be deficient in the soil as is potash or phosphoric acid. The use of certain commercial fertilizers, especially muriate of potash, is known to exhaust lime in soils. On heavy lands lime improves texture and drainage by hastening the decomposition of the organic matter. It converts soil-humus into active nitrogen available for plant use, and also frees potash and other inert fertilizing constituents. The Rhode Is-

land station has shown that the use of lime should not be necessarily limited to heavy bottom-lands, but that acid conditions exist even in upland soils which are well drained and not supposed to be sour. This station has experimented with nearly two hundred varieties of plants, limed and unlimed. The application of air-slaked lime on sour soil was at the rate of three tons to the acre during two years. This is considered a very heavy fertilization. The practice with many farmers is to apply a ton to the acre about every four years.

G. E. M.

How can we progress in farming unless we have the figures to show the cost of production? Let the farmers who have produced the largest crops on the fewest acres without decreasing the fertility of the soil come forward. They are the men we want to see and question at the institute. Perhaps a premium for the lowest cost of production would be good. Would not this be of more value than to award Mr. Smith a premium for the largest accidental pumpkin? \*



CLEARING BRUSH-LAND WITH ANGORA GOATS IN MONTMORENCY COUNTY, MICHIGAN

hills about the time they begin to come up, and thoroughly mixed with the soil, will send the sprouts along bravely. The weeder is the best thing with which to do the mixing. At the same time it will subdue any weeds that may be inclined to show themselves.

Finally, the farmer has no better friend in growing corn than a good cultivator. Regularly, as often as the earth becomes hard about the plants, it ought to be broken and loosened by the cultivator. We are learning that the teeth of this tool should not be long enough to reach down far enough to tear up the roots of the corn. We are not after them, but after the weeds and the hard earth.

These things every farmer who would grow corn must do. Is it too much? Think of the value of the coming harvest, and answer accordingly.

E. L. VINCENT.

Mr. Farmer, you can't afford to let your subscription to FARM AND FIRESIDE run out, and the paper stop, when it's only twenty-five cents a year!



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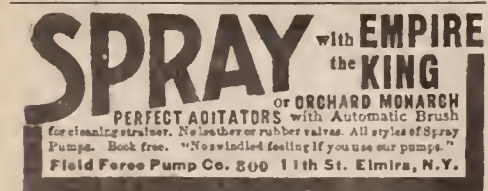


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## Gardening

By T. GREINER

YEARS AGO, when we had those long and severe winters, we had little trouble from insects in our gardens. I wonder how it will be after this last old-fashioned winter.

NOT EVERY NEW THING offered by seedsmen proves to be a good thing, but every good thing was once a new thing. We can't afford to ignore the novelties of the season.

THE SEEDS that look cleanest and brightest have not always been the ones to germinate the quickest, or to give the strongest plants. Sometimes even poor-looking seeds give satisfactory crops.

SOME OF THE TOMATO-SEEDS, especially of new varieties which we obtained this spring from different seedsmen, were poorly cleaned, and apparently gathered from entirely rotten specimens. Tomato-seeds of my own saving, being gathered from fully ripened but perfectly sound selected specimens, are much brighter, cleaner, and apparently plumper, than most of those I purchased from seedsmen. I shall watch their comparative behavior with some degree of interest.

THE OLD QUESTION, why his celery has made seed-stalks rather than good solid bunches, is brought up again by a reader. Usually seed sown after the middle of March, or in open ground in April or later, will not produce seed-stalks that same season. It is the early celery, grown from seed sown under glass in February or very early March, that is liable to make seed-stalks, or "bolt," as it is frequently termed. The selection of seed, seed-strain or seed-stock may have something to do with it, too. The plants started rather late, and grown right along under favorable conditions, without check by dry weather, etc., usually give us fine stalks, with no tendency to run to seed.

A SUNFLOWER-ENEMY.—A lady reader in Collingsworth County, Texas, complains that she is unable to grow sunflowers on account of the ravages of a "hard-shell brown bug" which infests the root below ground in large numbers, and finally kills the plant. From the meager description I am unable to recognize the enemy or to suggest a remedy. In such cases it is always a good plan to gather up a number of the insects or a piece of the infested plant or root with some of the specimens, and to send them, with a statement of the facts in the case, to the nearest experiment station or the department in Washington. These institutions will then investigate, and give what information is available.

WORMS IN THE GARDEN.—A lady reader in New York State complains that her garden is full of various kinds of worms. Last year they nearly destroyed her beets. What can be done? I don't know exactly what can be done. She did not tell what worms they were—cutworms, white grubs, wire-worms, or what. Thorough and continued tillage, however, will do much to clear the soil from any of these pests. The ground should have been plowed late in the fall. If neglected, plow as early as possible. If there are cutworms, you can poison a good many of them by means of pieces of sod with the grassy side sprinkled with Paris green; or you may plant cabbage, corn or beans, and watch for the cutworms every morning, digging them out about or near the damaged plants. If you plant beets, try applications of nitrate of soda to them in the early stages of their growth. Don't neglect fall plowing hereafter.

CAULIFLOWER QUERIES.—A Suffolk County, N. Y., reader asks about the plan of starting cauliflower directly in hills without transplanting. If I were to depend on the crop for revenue, instead of growing it as a rather unimportant side-issue, I believe I would feel safer when starting my plants in flats or a plant-bed, under glass for the early crop, in the open for the late crop. However, I have had excellent success in growing good cauliflower by sowing directly into hills, and this may be done in early spring, at the time we sow early cabbages in the same way, or a little later than when we start the plants in flats or plant-beds. The American-grown (Puget Sound) cauliflower-seed has always made strong plants for me, and given me about as good heads as the imported seed. Early Erfurt, with its selected strains (Snowball, etc.), is quite reliable. It takes a little more seed, of course, to start plants in hills than in beds for transplanting, and as cauliflower-seed is rather expensive, this may also be

quite an item. The main point about growing cauliflower is to give them very rich soil, no matter in what way the plants are started. They require great quantities of potash, and will not do well unless this is supplied. They also need some protection against the excessive heat and dry weather of midsummer. An application of nitrate of soda to the growing plants (not necessarily close up to them) will not come amiss.

VINE-BLIGHTS.—A reader in Batavia, Ohio, asks how to prevent blights on muskmelon, watermelon and cucumber vines. The answer usually given is, "Spray with Bordeaux mixture." It is easy enough to give this advice—it is far more difficult to make use of it in such a way as to save the plants when they are bound to blight. That the Bordeaux mixture affords some protection there can be no doubt; but in order to be effective it should be applied quite freely and quite frequently. When we allow bugs and beetles to riddle the plants, and open up the way for the blight-spores to enter without hindrance, we cannot expect to keep our plants free from diseases that stand ready to attack them. I invariably add some arsenical poison (preferably arsenate of lead, or disparene) to the Bordeaux mixture, and thus make sure that insect enemies will not do much damage. Some of these blights are insistent diseases, and often take the plants just as soon as we are guilty of the least negligence.

ONION-BLIGHT.—A reader in Glenwood, British Columbia, asks for a remedy for the onion "blight" which killed his crop last summer, and also wants to know whether it would be advisable to plant onions again on the same land. From his description I am unable to determine whether this "blight" is the onion-smut which is known to occur in Massachusetts, Ohio, Pennsylvania, Connecticut, and probably other states, and which always attacks the onion-plant while yet very small, or whether it is the onion macrosporium, which is often most conspicuous on the seed-stalks, forming a black, velvety coating, and less conspicuous on the leaves, and more of a brownish color. Our correspondent says this blight appeared like a "purple dust on nearly all the leaves." For the latter disease I can suggest no remedial treatment. The only thing that should be done in the case or should have been done in the fall, is to gather up all the refuse, and burn it. I doubt whether it would be safe to plant onions again on the same piece where this disease has appeared. But if it was the onion-smut, there is one way out of the difficulty: Grow the seedlings under glass, and transplant to open ground, as I do with my Prizetaker and Gibraltar onions, and the smut will do them little harm.

A SOIL-MIXTURE.—To get the right kind of soil in which to plant the various finer seeds in the greenhouse or hotbed is not always an easy task. Some of our soil composts, while well adapted for sprouting the seeds, are just alive with weed-seeds and insect life, and possibly fungus-germs. Sometimes we see the seedlings come up promptly, and grow thriftily for a little while, only to go down all at once with something like damping off. An inch or two of clear river-sand resting on some good rich compost has in my experience proved to be a good material in which to start onion-seedlings. When thus started, the latter have usually done well, and been free from such trouble as damping off; but we can't risk the clear sand for very fine seeds, such as celery. Sifted coal-ashes, substituted for the sand layer, is liable to pack quite solid over the seed, although I have managed to grow good cabbage-plants in clear coal-ashes resting on rich compost. This year I have made a mixture of river-sand, old rotted sawdust and coal-ashes, slightly enriched by the addition of a little wood-ashes, and ashes from old bones which had been burned in the stove. Probably a little fine bone-meal (dust) in place of the bone-ashes would be all right. All these materials were thoroughly mixed up, without holding to exact proportions, and only just so that we have a reasonably loose and fine earthy material upon which to deposit tomato, onion, cabbage, beet, lettuce, celery and other seeds, and with which to cover them. The story can soon be told. If the seeds germinate promptly, and there is no reason why they should not do so, the young plants will grow to some size before the weeds start up from beneath the layer of mixed materials that is free from weed-seed.

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## Fruit-Growing

By S. B. GREEN

TIME TO PRUNE SOFT MAPLE.—J. E. T., Farmington, Wis. In the mild days in February and March there is no special objection to trimming the soft maple, but the big wounds should be coated at once with white lead. They will probably bleed a good deal in the spring, but I do not think that it will especially hurt them. I would much rather do this pruning in the autumn or late summer, as if done at that time the wounds will have thoroughly dried by spring, and there will be no flow of sap from them.

BUDDING LEMON-TREES.—J. D., Elk, Kan. Your lemon-tree that is grown from seed will probably not bear for a long time, and the same would be true of oranges grown in the same way, for the reason that seedlings are generally a long time in coming into fruit; but if they are budded or grafted with some early fruiting sort, they will fruit early. I would suggest that you get a few buds from some orange-plant that you know to bear well, and have it budded. Almost any good horticulturist or greenhouse-man would do this work for you at a small figure. It may be budded at any time when the bark peels.

BLACK BEN DAVIS AND GANO.—J. S. P., Hatches, W. Va. There is practically no difference between the Black Ben Davis and Gano apples. They are said to be distinct, and it is possible that they have come from different seedlings, but so far as the general nursery and fruit-growing business is concerned they are the same. I have seen what were supposed to be the true Gano apples side by side with Ben Davis that have been selected on account of their dark color, which sometimes is characteristic of a branch or two on a tree, and I could not see any difference in them. They are both very handsome fruits, and popular market apples, although of course, like all apples of the Ben Davis type, they lack very much in quality.

EXTRACT OF BLOOD-ROOT.—J. W. M., Dayton, Ohio. Millsbaugh, who is one of the best authorities on this subject, says that blood-root should be gathered when the seeds are ripe. The root is chopped and pounded to a pulp, and weighed; then two parts by weight of alcohol are taken, and after thoroughly mixing the pulp with one sixth of it, the rest of the alcohol is added. After having stirred the whole, pour it into a well-stoppered bottle, and let it stand eight days in a dark, cool place. The tincture is then separated by decanting, straining and filtering. Thus prepared it is, by transmitted light, of a deep orange-red color, slightly bitter and acid, and has a strong acid reaction to litmus. It is used in medicine especially in compounds with lobelia. It is poisonous in large doses.

TREE-CRACKS IN MOUNTAIN ASH.—A. H. C., Duluth, Minn. Many trees have cracked during the past winter in the Northern states, and we have had a number of very fine soft maples that have done this. I think the best way to treat these cracks is to drive hard-wood wedges into them just sufficient to prevent their coming up, then fill the crack with white lead or grafting-wax, and wrap with burlap or similar material. When treated in this way they will generally heal over in good shape in the course of a few years. If the cracks are not wedged open they will heal over, and then burst again the following winter, and in that way a bad sore will be formed. It is very important to use grafting-wax or similar material, in order to keep out the water, as if this is not done the wood will decay.

LIME ON GARDEN.—W. B. M., Minneapolis, Minn. The effect of putting slaked lime or quicklime on the soil of a fruit or vegetable garden would be to hasten chemical action. If the garden has been heavily manured with stable manure, it is an excellent treatment, and will give good results. It is not that the lime itself furnishes any plant-food, but by its action in the soil it sets plant-food free. On this account we call it an indirect manure. Continued applications of lime to the land without the use of stable manure is very apt to run out the land. It may be used in large quantities without danger, but an application of one hundred bushels to the acre would generally be considered about the right thing. You will find that slaked lime is much more easily applied than quicklime if the quicklime is in large lumps. Where quicklime is used, it is customary to leave it in piles on the land, and spread it after it has slaked out.



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# Poultry-Raising

By P. H. JACOBS

## Fresh Air in Poultry-Houses

As so many diseases and difficulties occur by mistakes in the ventilation of poultry-houses in winter and early spring, the subject may be discussed at any season; hence more regarding ventilation will not be out of place. Every reader can experiment and learn something regarding his poultry-house, as it may be unlike that of his neighbor. Fresh air is invigorating, and also a valuable adjunct to thrift and health, but the first thing to learn is whether there is already a sufficiency or deficiency. Go into an unplastered poultry-house on a cold, windy night, light a candle, and watch the flame. Although the doors and windows may be tightly closed, and to all appearances the house may be "air-tight," yet the flame of the candle will flicker if the wind is high, provided, as stated, that the house is not plastered. This is evidence that the air comes in from somewhere, and yet a thorough search may not disclose the openings by which the air enters. A poultry-house that is kept clean and in good condition will offer no obstacle to the fowls in the form of impure air. It is only when the house becomes filthy that odors are noticeable and ventilation is required. No ventilation is required in the majority of poultry-houses, as it would be a very difficult matter to keep the cold air out rather than let it in, and no ventilation need be given at night. The doors and windows may be opened during the day, but only when the weather is dry, as dampness is injurious to poultry. Hundreds of fowls die every year from too much cold air given for ventilation, and this should not happen. There are but few poultry-houses built that are not self-ventilating, even when built with the best of care. In this connection do not overlook the fact that poultry-houses differ, and that each of itself is a subject for careful consideration.

## Indigestion and Feeding

Nearly all ills to which fowls are subject may be traced to indigestion, resulting from overfeeding on grain. Many difficulties in the forms of ailments would be avoided if farmers and poultrymen were not too liberal with grain, for at this season grass is the best food. For

summer, and yet nearly every one realizes the fact that the birds do not thrive on an abundance of grain during the warm season. For a while such feeding will, in all probability, increase the laying powers of a hen, as corn is a very stimulating food, but after that time the number of eggs produced will be greatly decreased. In winter the feeding of grain may be more liberal, but in summer light and bulky foods should be preferred.

## The Small Flock

Every resident of a town or village where there are suitable lots of ground can profitably keep a few fowls, both to secure fresh eggs and for pleasure. There is no better opportunity for enjoyment by a family with a small plot of ground than with a small flock. They will cost so little for feed and labor as to entail no loss of time whatever in their management. The fresh eggs daily, and the pleasure of a newly hatched lot of chickens, more than compensate for the limited share of attention required. The family flock always pays, because there is more or less food from the scraps that can be utilized, and the eggs used are known to be fresh, which is not always the case when one must buy them. The younger members of the family enjoy assisting in the work, and the workman who comes home from the workshop in the evening will nearly always find time to observe the flock and enjoy having the hens in his yard. It is asserted that more eggs are produced by the small flocks of towns and villages than on farms.

## Inquiries Answered

SEPARATING BREEDS.—S. B. wishes to know "if his Minorcas must be kept separate from his other fowls." It is not necessary to separate them if only Minorca males are used, and provided he can distinguish the eggs laid by his Minorcas.

LOSS OF CHICKS.—Mrs. W. S. Danville, Ill., states that "her chicks die every spring without apparent cause." She also asks "if coal-ashes on their grounds injure them." The loss may be due to lice or improper feeding. Coal-ashes are not considered injurious to the chicks.

COMPARISON OF BREEDS.—A. C. J., Dodge Center, Minn., seeks advice as to



AFTER A WORM

fowls in confinement it may be chopped fine, and fed three times a day. When symptoms of indigestion or bowel-disease are noticed, the food should be immediately reduced in quantity, no rich food to be given. The soft food, if such is fed in the morning, composed of different meals, should be stopped, and only millet-seed be given to the fowls, and in very small quantity, so as to induce the hens to scratch. Two or three days of fasting will do no harm. Sometimes the fowl becomes excessively fat. When this is the case, the quantity of food given to the birds must be the minimum, because the system requires that it be reduced. Liver-disease is caused by overfeeding on corn or wheat, and it is remarkable how much grain is used for feeding poultry in

"whether White Plymouth Rocks are more prolific than Light Brahmas," and H. A. H., Dunlap, Ill., asks "which breed of Barred Plymouth Rocks are the best egg-producers." It is impossible to select the "best" breed, as conditions and management affect the egg-supply as well as the breed.

THE MALES.—D. W. K., Boulder, Col., asks "if hens will lay more eggs when the males are removed, and how long after the males are gone can the eggs be relied upon to hatch." In reply it may be stated that the presence or absence of males does not influence egg-production; also, if the males are removed it is safe to use the eggs for hatching for ten days thereafter. Much depends upon conditions and circumstances.



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THIS is a question often asked by our farmers. Just now I am thinking about feeding grain to cows that are out on pasture. Is there anything in it? Will it pay to send away to the corn and wheat country for high-priced grains to feed our cows during the summer months? These are fair questions. Not many of us are working simply for the pleasure to be found in our business, although that is a most valuable incentive. We want to count up some dollars when the work is done, and say, "I am so much better off than I was at the beginning of the season."

I asked one of the best farmers of central New York what he thought about feeding mill-stuffs to cows on grass. He told me that he did not do it. "When my cows go out in the spring," he said, "I take away the grain ration." He believed, and I think he is right, that when cows go out of their winter quarters they should be in the best possible health and in good flesh. This man had for years been testing cows for several creameries, and I put a great deal of reliance on his statement that the cow which is up in good flesh gives richer milk than one which is poor and run down. After that, according to this man's theory, the cow will get from the grass, if in good pasture, all she needs to enable her to do her best.

But over against this man's experience I will place that of another man who feeds his cows all summer long, and believes he gets good returns. He would be foolish to keep it up if he did not, and I give him credit for being a man of good judgment. This man has been doing for a good many years what the first one has not—he has kept a careful account with his cows individually; he has not been working in the dark. All these years he has been feeding grain to his cows, and he says he has greatly increased the profits from his herd by doing so. I can see how it may not all be due to the grain. His cows may have been carefully selected, and so bring in better returns irrespective of the grain ration given them; but it is fair to admit that the grain must have had more than a little to do with the increased yield of milk and butter. When a man sits down with his book on his lap, and shows me the figures in black and white, I am not inclined to doubt what he says.

Personally, I have been following this latter dairyman's lead for some time, and I feel sure that in doing so I am not making a mistake. Surely my cows are doing better and better work every year. They have been in the same pastures, and have been given the same care as formerly, so that I must look somewhere else for the secret of their better service, and I find it in the grain ration. Grass in and of itself is not really a perfect food. It is largely water. It needs just what the grain contains to perfect it.

So far I have not believed that it is wise to feed a heavy ration of grain to cows on grass. I can readily see that there might be a point beyond which it would not be profitable to go. We all know that a man or an animal may eat too much of a given thing. And so I am studying. Every man must do that for himself. If we should try to follow the example of every man with a theory we would soon be out of business. But it does pay for us all to work along these lines carefully, and be guided by the results of our own experience.

E. L. VINCENT.

## The Feeding Value of Speltz

We have had considerable inquiry regarding the feeding value, yield to the acre, and other similar questions concerning speltz, which, correctly speaking, should be termed "emmer." This is a comparatively new grain, and has not been experimented with to any great extent in this country. More light is needed concerning its comparative feeding value for the different classes of animals.

It seems to grow and thrive well on almost any kind of soil. It ripens at about the same time as does spring wheat, and grows to about the same height. In some sections difficulty has been experienced in getting a variety which was stiff enough in the straw or would yield enough grain to the acre to warrant its growth. It is claimed to be well suited to semi-arid regions, as it can withstand a considerable amount of drought. Under favorable conditions it will yield from thirty to sixty bushels an acre, averaging about forty to forty-five bushels one year with another.

As a feed-stuff for farm-animals it has been fed to dairy-cattle, sheep and horses with very good results. For beef-cattle

a certain amount of it, when fed in conjunction with other grain, would no doubt give good results. On account of its chaffy nature it is not a very desirable food for swine, especially young and growing animals or those being fattened. For mature breeding-animals it will serve about the same purpose as oats.

At the Iowa Experiment Station it has been fed in conjunction with clover for sheep-feeding purposes. Yearling wethers on full feed ate almost two and one half pounds a head a day of the speltz. They made on an average .459 pounds gain a head a day, and produced one hundred pounds of gain from four hundred and twenty-three pounds of clover hay and three hundred and twenty pounds of speltz. The lot fed on corn and clover hay made an average daily gain of .454 pounds a head, and consumed four hundred and twenty-one pounds of clover hay and three hundred and two pounds of corn to produce one hundred pounds of gain. In this instance the speltz made a good showing. It showed that pound for pound and when fed in conjunction with clover hay that speltz was almost as valuable as corn. The animals relished the speltz very much.

The South Dakota Experiment Station has conducted some experiments in which speltz was used in comparison with corn and barley for feeding dairy-cows. In their test the speltz gave good returns, being nearly as good as corn and barley for milk-production. Their results show that when speltz was fed, one pound of butter-fat was produced from every 17.5 pounds of the speltz. When corn or barley was fed, one pound of butter-fat was produced from every 15.5 pounds of the corn or barley fed. This shows up speltz in a favorable light. On account of its chaffy nature it could hardly be expected to give as good returns pound for pound as barley or corn.

In those sections where it can be grown, those men who have it on hand will find it a profitable food for live stock. —W. J. Kennedy, in Wallaces' Farmer.

## Pasturing Swine

Where one has more land than he can farm properly—which means, also, profitably—or land which is too rough or hilly for easy farming, it is probably good business to turn such excess land over to permanent pasture either for cattle or swine; but when we compare the productivity of tillable land properly planted to profitable crops with its possible income as a pasture we wonder that farmable land can be pastured at all. This is especially true in regard to pasturing swine, which are not as distinctly grazing animals as the ruminants; and while we must admit that a fine clover-field is a magnificent place in which to turn a few brood-sows or a lot of store-hogs, yet, as I have said, when we compare its feed-possibilities thus pastured with what might be had from the same land by cutting the clover and carrying it to the swine in a feed-lot, making into hay what would be trampled by pasturing, putting part of the land in sugar-corn and Indian corn, cow-peas, soy-beans and rape, mowing that part which is left in clover three or four times in a season, the balance of profit is very much against the plan of pasturing.

It is true there is more labor involved in cutting and feeding the green crops, and harvesting and storing the surplus for winter feeding, but with proper system and good stock the labor can be made very profitable and the yield of the land greatly increased. All the crops I have mentioned I have found profitable to feed my swine by the soiling plan, and while there is generally more or less waste in the forage not being as completely eaten as when fed to cows, I regard the waste as much less than if the crops were pastured. I have saved in the matter of particular fencing, and saved probably more in not having the tramping of the soil, that must always be an incident of loss where animals are turned to pasture.

I am not writing against the claim made by many farmers that pigs in clover with an additional feed of corn and plenty of water to drink make good pork, and make it easy, and that such a field is in good condition to produce almost any crop that shall follow the clover; but my claim is that by this method there is an unnecessary expense, or at least a waste of feed and land, that our farming should not be required to sustain.

W. F. McSPARRAN.

## It Won't Cost You a Cent

to attend the St. Louis World's Fair for ten days. FARM AND FIRESIDE will pay every necessary cent. See page 14.



## Live Stock and Dairy

### The Luck of the Calf

THIS spring finds many fall and winter, and even last summer, calves subject to the "luck of the lousy calf, that lived through a hard winter and died in the spring." The winter has been severe, and has taxed the vitality of many a weakling animal. Domestic feed has been not overplentiful, and commercial feeds high. Too many farmers follow the unwise policy of reducing the feed on the animal that is not making a direct money return. The young stock is regarded as more of an expense than a good investment, and every farmer knows that "expenses must be kept down." Many a calf and colt will walk to pasture this spring carrying less weight than it carried when it walked out of pasture last fall. It has grown weaker and wiser. Its increase of weight has been only in days and experiences of hunger and unthrift.

It is almost a vain thing to expect such an animal to grow up into great usefulness, for a stunt in a calf is like a deep scar on a tree—it rarely grows out of it. Now, when such a calf is under a year old, and not pretty thrifty at that, it can scarcely be expected by its industry and thrift at pasture to overcome the bad effects of the hungry winter, for unless the pasture be very rich and abundant the demands of a growing animal are quite equal to its individual ability to supply them, without its being expected to create a surplus against the deficit of the winter's lean lousiness.

Each season carries its own obligation to the growing calf, so therefore turn it not to pasture in a condition of poverty that has been almost as strong as its "luck."

W. F. McSPARRAN.

### Why Milk Spoils or Keeps

In an experiment at the Connecticut Storrs Station on the relation of temperature to the keeping property of milk the bacteria in milk multiplied five fold in twenty-four hours when the temperature was fifty degrees Fahrenheit, and seven hundred and fifty fold in the same time when it was seventy degrees.

Milk kept at ninety-five curdled in eighteen hours; at seventy in forty-eight hours, and at fifty in one hundred and forty-eight hours. So far as the keeping

course of time become far more unwholesome than sour milk, since it is filled with organisms that tend to produce putrefaction.

Although the temperature of fifty degrees is to be emphatically recommended to the dairyman for the purpose of keeping his milk sweet and in proper condition for market, he must especially be on his guard against the feeling that milk which is several days old is still sweet and has not curdled. Quite the reverse is the case. Old milk is never wholesome, even though it has been kept at a temperature of fifty degrees and still remains sweet and uncurdled.

This very considerably modifies some of our previous ideas concerning milk, for it has been generally believed that so long as the milk remains sweet it is in good condition for use. The contrary is the case if it has been kept at a temperature of fifty degrees or in this vicinity.

It is not unlikely that it is this fact that leads to some of the cases of ice-cream poisoning so common in summer. The cream is kept at a low temperature for several days, until quite a considerable quantity has accumulated or a demand has come for ice-cream, and when made into ice-cream it is filled with bacteria in great numbers and of a suspicious character.—Prof. H. W. Conn.

### A Fine Shorthorn Cow

The magnificent shorthorn cow shown in the illustration is Kensella 2d, owned by Mr. J. K. Innis, Bradford County, Pennsylvania. The milk record of this cow is eighty-eight hundred pounds, testing three and eight tenths per cent butter-fat. She is nine years old, and weighs twelve hundred and fifty pounds.

Mr. Innis' herd is under the most skillful management of Mr. L. D. May, than whom there is probably no more practically efficient dairyman in the country. The Innis herd has about one hundred animals in it on a farm of three hundred acres of farm-land and pasture. The average ration for mature cows is forty pounds of corn ensilage and eight pounds of grain, with hay. Butter is made at a creamery on the farm. The fine imported bull Duke Butter Cup



KENSELLA 2d

property of milk is concerned, low temperature is considered of more importance than cleanliness.

In milk kept at ninety-five the species developing most rapidly is the undesirable one known as "Bacillus lactis aerogenes." At a temperature of seventy this species develops relatively less rapidly in the majority of cases than "Bacillus lactis acidi," which latter is very desirable in both cream and cheese ripening.

The bacteria in milk kept at fifty increase slowly, and later consist of very few lactic organisms, but of miscellaneous types, including many forms that render the milk unwholesome.

These bacteria continue to grow slowly day after day, but the milk keeps sweet because the lactic organisms do not develop abundantly. Such milk will in the

heads the herd. He is out of Duchess Butterfly, whose milk record with first calf was eight thousand nine hundred and seventy-four pounds in forty-four weeks.

If there is a general-purpose cow that the American farmer should tie to, Mr. May has developed her in the hills of Bradford County; but whether we admit or not that there is such an animal, we must all agree that the picture shows a superb milking shorthorn.

W. F. McSPARRAN.

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## Farm Selections

### Seeding to Alfalfa

IT is easy to secure a good stand of alfalfa—as easy, at least, as with clover and grasses, and generally easier—yet there are a few simple but essential points to bear in mind.

The land must be rich. If it is poor, make it rich with stable manure before you sow alfalfa. It is better to manure heavily, then grow a crop of corn, keeping it clean so that no weed-seed is sown in the soil, and the next season sow to alfalfa; or potatoes may precede alfalfa with good results. The land must be well drained, either naturally or by tiles. If it is very tough, heavy limestone clay, loosen it up by means of heavy manuring, else it will throw out the alfalfa the first winter. It ought to be a limestone soil. If you are off the limestone, and if blue-grass is not natural to your farm, do not sow alfalfa without first liming the field. Spread evenly about twenty bushels to the acre of freshly slaked lime, and harrow it. There are millions of acres in Ohio, New York, Pennsylvania and New England on which alfalfa can be profitably grown, and when once understood there is no crop of more value to the farmer, especially to the stock-farmer.

It pays to give careful attention to getting a stand, as it remains in profitable growth for many years when once well started, and it greatly enriches the field on which it grows. Plow the field deeper than ever—plow early in the winter if you can. Work it up with harrows early in the spring. If you cannot plow early, disking corn or potato stubble in the spring may prove better than late plowing, as it gives a better seed-bed. Make a seed-bed as fine as for garden crops, and sow thirty pounds to the acre of the best, cleanest seed obtainable, being sure that there is no dodder-seed in it.

If your ground is rich, free from weeds and well prepared, you may sow a little less than thirty pounds to the acre.

If the land is dry and somewhat cloddy, roll it hard after seeding. If it is moist, so that the rolling would pack it unduly, drag with a plank drag. Leave it smooth. If you can get earth from an old alfalfa-field in good health, sow some of this soil on the field.

There are three principal causes of failure in alfalfa-growing. The first and most prevalent one is lack of proper bacteria in the soil. This can easily be remedied by securing soil from a field where alfalfa grows luxuriantly, and where it has grown for years; the older the field, the better. This soil acts exactly as yeast does. When the conditions are made right, the bacteria spread rapidly, and soon the whole field is impregnated, and the crop will grow. Such soil may be spread on fields where alfalfa is already feeble, and if this is the difficulty the result will be beneficial.

The second cause is the lack of potash in the soil. If properly inoculated and drained, the strong clay soils are the best. On any other, and even on these, an application of sulphate of potash, or a mixed fertilizer rich in potash, will be of decided advantage. If the soil is in the least acid, an application of twenty bushels of lime to the acre is absolutely necessary.

The third difficulty is lack of drainage. Alfalfa likes plenty of water, but there must not be so much in the soil that air cannot get to the roots. If the soil is water-soaked for any length of time the crop will not thrive.

Fox-tail, or "pussie-tail," grass is the worst enemy of alfalfa during the first season. As soon as it becomes apparent that the weeds are going to get the advantage in your fields, clip them over with a mowing-machine. Do this three or four times if necessary. If they are thick, rake them off. Alfalfa smothers easily when young.

Watch it, and if it is overtaken by yellowness of leaf, which means rust, clip it off as close to the ground as you can with the mower. Leave a strong growth in the fall to shelter it and hold snow. Turn no stock on it, even in cold weather, as tramping breaks the crowns. Do not let the hay-cocks stand long on alfalfa—they will kill it.

Alfalfa has the power to gather nitrogen from the air through the medium of tubercles on its rootlets. In this manner it greatly enriches soils on which it grows. Addition of mineral elements of fertility enables alfalfa to gather the more nitrogen, and thus more greatly to enrich the soil. Experience of centuries in Europe proves that alfalfa is one of the greatest soil-enrichers in the world. Experience in America confirms this. Alfalfa-fields when broken yield heavily of corn, wheat, potatoes, or whatever may be sown thereon.—F.E. Dawley.



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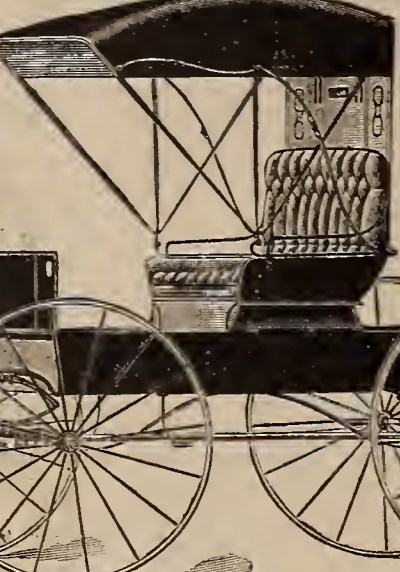
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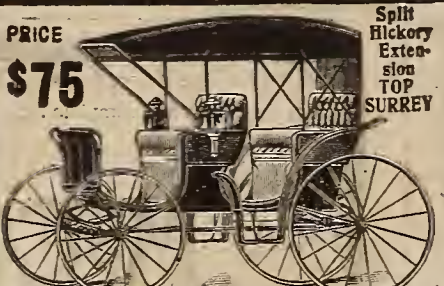


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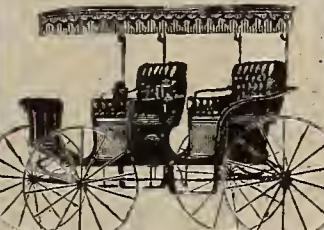
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### SIDES CAN BE LOWERED INSTANTLY

And it becomes a solid rack for hauling hay, straw, fodder, sheaf wheat, etc., with ample strength and capacity for three tons. Very convenient for husking corn with side lowered as shown in cut. Made 14 feet long and regular widths. Sold direct to farmers at manufacturers' prices, freight prepaid. Write for Catalogue and prices.

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has ever been presented to the public and which has been of such wonderful merit as

## Kendall's Spavin Cure.

It is the old reliable remedy for Spavins, Ringbones, Splints, Carbs and all forms of Lameness. It cures without a blemish because it does not blister. Price \$1.60 for \$5. As a liniment for family use it has no equal. Ask your druggist for KENDALL'S SPAVIN CURE, also "A Treatise on the Horse," the book free, or address DR. B. J. KENDALL CO., Enosburg Falls, Vt.



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Send for free catalog of Poultry and Eggs Best and cheapest eggs from the best strains, 33 varieties. B. Marshall, Box 451-B, Beltsville, Md.

# The Grange

By MRS. MARY E. LEE

## L. P. Bailey

THE life of a successful man reads like a romance. At first Nature, to test his courage and resolution, confronts him with obstacles almost insurmountable. If he overcomes, she turns to him a smiling face, heaps his lap with treasures, and places on his brow the laurel wreath. The career of L. P. Bailey is no exception to this rule.

His parents were pioneers, suffering all the hardships incident to first settlers. He secured his education in the common schools, and the Friends' Academy, at Mt. Pleasant, Ohio. At nineteen he began teaching, and taught for seven winters. In the summer he farmed. For a number of years he raised mutton-lambs for market. In the winter of 1877-78, to realize upon a debt, he took three head of Jersey cattle. He was prejudiced against the Jersey, but his wife noted the improved quality and quantity of butter. They became interested in the breed, and added to the herd. Mr. Bailey is a shrewd business man, and he soon built up a reputation for handling fine Jersey cattle. His reputation and business grew apace. He owned no land, and had no credit save that of inflexible honesty. He borrowed money to buy cattle, which he sold at a good profit. Just as times seemed bright for him he lost three thousand dollars through the rascality of a subagent.

Mr. Bailey was general agent for a fertilizer firm. His subagent collected the money, and left for parts unknown. He wired the company which he served, and went to the bank and told his story, concealing nothing. Time was extended on his loan, the fertilizer company did not press him. He pursued his business with unabated zeal and judgment, and against overwhelming obstacles paid his indebtedness. In the meantime he found a desirable farm, and bought it, giving a mortgage thereon. Sometime we hope to give the details of those hazardous days for the struggling Quaker family. It is enough at this time to say that by tireless energy, unswerving integrity and careful attention to details obstacles were overcome, a fine herd of Jerseys was established, and out of the hardest environments a successful career was carved.

Early in 1894 Prof. Thos. F. Hunt, the late Prof. J. F. Hickman and L. P. Bailey issued a call for those interested in dairying to meet in Columbus on February 23d. The State Dairymen's Association resulted, with Mr. Bailey its first secretary. He held this office until 1901, when he was elected president. Against the earnest wishes of the association he declined to serve longer than two years. He was elected a member of the State Board of Agriculture in 1904. To this office he will bring shrewd and kindly judgment, experience, integrity.

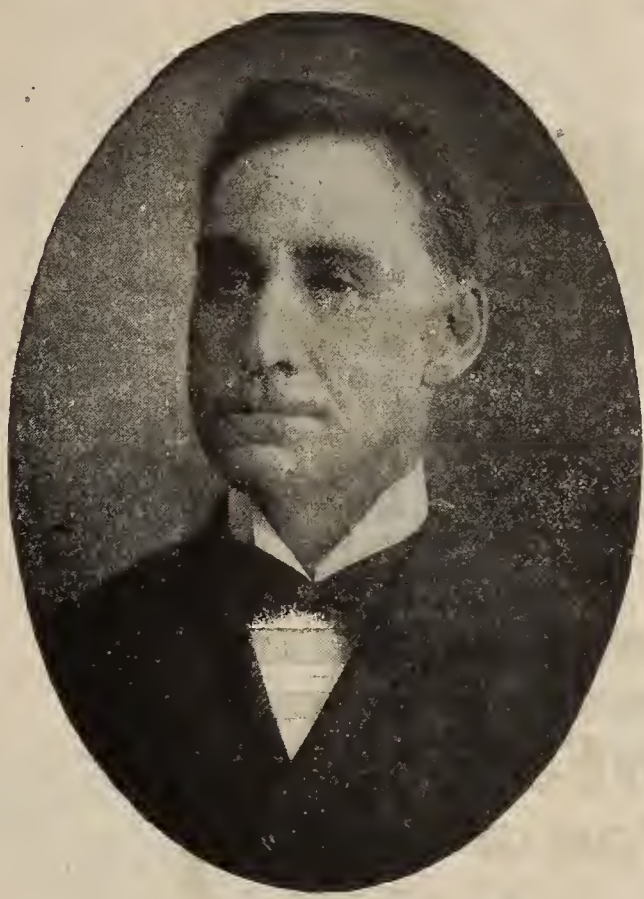
Mr. Bailey's farm consists of two hundred and fifty acres, carrying about one hundred and twenty-five head of registered A. J. C. C. stock. His stock goes into every state in the Union. In 1901 his farm produced 262,637 pounds of milk from an average of 50 cows—about 5,252 pounds of milk from each cow. The fat content was 5.35 per cent. All products are sold in the form of milk and cream. The farm is well equipped with good, substantial buildings. Mr. Bailey also operates three creameries. He is a devoted member of the Society of Friends, a loyal and zealous worker in the grange. "You cannot speak too highly of him," said a neighbor whose farm adjoined his. "I have lived by him twenty years, and I never knew him to do a dishonorable act. While he is a shrewd business man, he is also one of the most generous."

Such lives give the lie to the assertion that a man cannot be honest and succeed. The only true success comes through unswerving integrity.

## Paternalism

A very large per cent of American people are born with the notion that the government owes them a living. The more daring pursue the principle, and the balance, either because they hope for future preferment, and do not want to

needlessly antagonize, or because it is easier to be indifferent and pay than watchful, permit the growth of the sentiment. It is only necessary to examine the history of your own district in the light of knowledge. How many positions have been created, clerkships filled, money spent in various guises, to reward party-workers? "He owes it to his constituency that he do so and so." "He looks after his constituents." "What has



L. P. BAILEY

he done for us?" are phrases heard every day. It is not strange that a notion has grown in some quarters of the divinity that doth hedge, not a king, but "the people." It can be seen in every legislative hall. "Give us ten hours' pay for eight hours' labor," says the labor union. "We must have a public building costing one hundred thousand dollars, that Mr. Doe may get a contract and our henchmen have work," says a district. "We must have a million for this improvement or that." "But is it needed?" "Needed! I should say so. Unless we can find work for the men of this township we are going to lose in the next election." 'Tis only a step from this to the notion that the government should divide all property equally among the people, and as soon as the idle or improvident have run through with their allotment, divide again.

"Buy this road-machine, and we will put the finest grindstone in the country in your shop," says the agent to the leading trustee. "Put our school-supplies in your schools, and you can ride in the finest buggy in the township," persuades the agent. And thus it goes, from the lowest to the highest. Away with such sycophantic notions! Let every man stand squarely before his fellows, and say, "I am endowed with brain and brawn. I ask no favors. I can and will carve my own life. I am free—free as the winds of the heavens. I will not bow down to you, nor place my neck under the yoke. All I ask is a fair field and no favors." With such a spirit pervading our national life less will be heard of "graft," "pull," "debts to his constituency," and criminal practices. That individual or country loses the freedom of initiative or resistance when it clamors for aid or paternalism. Teach in the homes and the schools that lofty independence which recognizes the right and duty of each man's depending on his own exertions for maintenance, and the beauty of the golden rule, "Do unto others that which ye would were done unto you."

## An Innovation in Ghosts

There are ghosts and ghosts. The "insanitary specter" who, according to a servant-maid in London "Punch," called at a house in the absence of the mistress was an unusually substantial shade, and wore the uniform of the health department.—Youth's Companion.

## A Free Trip for You

Would you like to get a free trip to the great St. Louis World's Fair, all your expenses paid—every necessary cent? See page 14.

# HEAVES



THE feeding of undue quantities of bad, musty or dusty hay, or severe exercise after full feed, is the usual cause of heaves in horses. Red clover in large quantities, too, is especially apt to produce this disease.

## Symptoms.—Animal will

show first symptoms after full feed and large draught of water if put to fast work. The onset of the disease is characterized by a dry, hacking cough, which may appear several months before there is any other signs manifest, such as lifting of the flanks and distension of the nostrils. A very constant symptom is slight frothy discharge from the nostrils and rattling in the head and windpipe.

Bronchitis is also very frequently associated, and is characterized by moist, coarse rales or rattling. In severe cases the abdominal walls are lifted with each expiration. This is done to expel air from the lungs, which in health is done by the elasticity of the cell-walls.

**Treatment.**—Feed with care, avoid dust of every kind. Horses suffering from this disease should never be permitted to gorge themselves with food or drink. Large quantities of bulky food should be avoided. Hay and grain should be made damp an hour or two before given. The following formula gives excellent results: Fluid extract of stramonium, fluid extract of lobelia, of each one ounce; Fowler's solution of arsenic, six ounces; mix, and give a tablespoonful in half a pint of water on food two or three times a day.

When relieved, follow this treatment with regular small doses of Dr. Hess Stock Food, the great horse tonic, and the horse will become strong and active, with a brilliant coat, and be immune from all the common ailments. His food requirements will be less; all his food will be eaten with relish, and all of it will do him good.

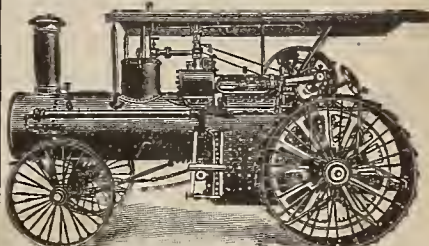
For every disease and condition for which Dr. Hess Stock Food is not recommended the little yellow card in every package entitles you to a letter of advice and special prescription from Dr. Hess (M. D., D.V.S.), who formulated Dr. Hess Stock Food. This stock food is endorsed by medical and veterinary colleges. If these colleges know of nothing better than Dr. Hess Stock Food for horses, cattle, hogs and sheep, it must be good. No unprofessional manufacturer can equal it.

Sold on written guarantee, 100 pounds, \$5.00—except in Canada and on Pacific Slope; smaller quantities at a slight advance. Fed in a small dose.

Dr. Hess Stock Book, a standard work consulted and commended by veterinarians, will be sent free if you state what stock you have—how many head of each—what stock food you have used and mention this paper. Address Dr. Hess & Clark, Ashland, Ohio.

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have come to realize the fact that for efficient and permanent service, there is no power they can take into the field so satisfactory as the

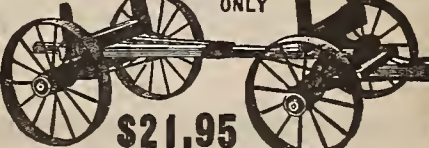


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Modern invention shows at its best in their making. They have no superfluous parts or trappy devices. Rear Geared with steel gears. Cross heads and slides are protected from dust. Cut shows single cylinder. We make also double cylinder engines. Burn wood or coal, or straw in direct line. Late catalogue describes fully this matchless engine line and famous New Rumely Separators. Mailed free. Write. M. RUMELY CO., La Porte, Indiana.

## Farmers' Handy Wagon

With 4-Inch Tire Steel Wheels



ONLY \$21.95 Low and handy. Saves labor. Wide tires, avoid cutting farm into ruts. Will hold up any two-horse load. We also furnish steel wheels to fit any axle. Any size wheel, any width of tire. Catalogue free. EMPIRE MANUFACTURING CO., Box 109A, Quincy, Ill.

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Send us your name and address tonight and we will send you free our "Farm Hand" Sickle and Tool Grinder. Combines Automatic Sickle Grinder, Tool Grinder, Saw Gummer and Polishing Machine. Both Emery and Corundum Wheels, 4,000 revolutions a minute. In fact its \$41.00 of Machinery for \$8.45. Use it ten days. Then either return at our expense or send us our special price \$8.45. Write now. Agents Wanted. WESTERN IMPLEMENT COMPANY 705 Park Street Port Washington, Wis.

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as they're dug into our Ventilated Bushel Crates. Store them without rehandling—less decay—one third time saved. Strong—no breakage. No. 2-90; No. 1-heavy—11c. Ask for free booklet No. 17. Geneva Cooperage Co., Geneva, O.

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best by Test—78 Years Fruit Book free. We PAY CASH WANT MORE SALESMEN WEEKLY STARK BRO'S, Louisiana, Mo.; Danville, N. Y.; Etc.



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## DR. HESS Poultry Pan-a-ce-a

Is the prescription of an eminent veterinarian and successful medical doctor—a scientific compound that works Nature's way in establishing systemic health and preventing disease. It quickly cures cholera, gapes, roup, leg weakness; expels worms and is a remedy for all poultry disorders. It is in no sense a stimulant—it gives permanent benefit; forces rapid growth of chicks; makes hens lay in all seasons; conditions market poultry for early sale. Costs a penny a day for 30 chickens. Dr. Hess Poultry Pan-a-ce-a is sold in 1½ lb. package, 25c; 5 lb., 60c; 12 lb., \$1.25; 25 lb. pail, \$2.50 (except in Canada and on Pacific Slope).



## Instant Louse Killer

**KILLS LICE.**—When your hens are sitting they are tortured with lice—when they come off, the little chicks are frequently killed or their growth stunted by lice. All poultry is afflicted more or less with these pests. Keep your poultry free from lice with **Instant Louse Killer**. Cost, 1 lb., 25c; 3 lbs., 60c.

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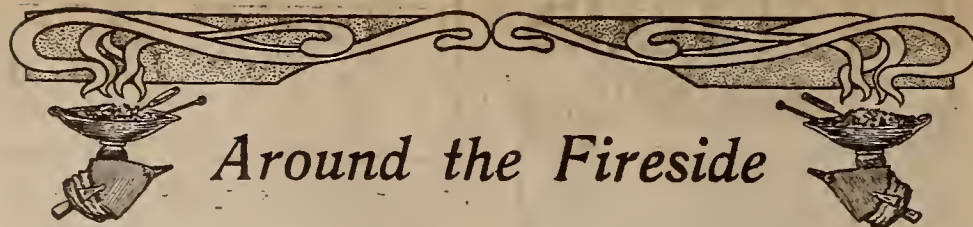
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## Around the Fireside

### Wren Homes and Ways

**W**HEN the house-wren is about to build a home it does not look up a good location on a shrub or the branch of a tree. Instead, a receptacle of some sort is found, filled nearly full of various kinds of material—usually bits of twigs—and on this foundation a delicate, soft little nest is made. As wrens often select an object larger by far than is necessary for their purpose, this peculiarity in their building-habits causes them much extra labor. These birds also make many sham nests; just why is a mystery. It may be for the purpose of deceiving over-curious or malicious humans; possibly it is due to a mania for house-building—nobody knows. They are much given to the selection of queer locations for their homes. This may be owing in a measure to the fact that they are companionable little creatures, and like to live near or about people's houses. They have been known to make nests in a rag-bag on a back porch, in an old shoe, in the crown of an old hat, and in the pocket of a coat left hanging in a convenient place. One pair took possession of a clothes-line box, gathering together as a foundation for the nest proper a medley of oak-leaves, shavings, pieces of suspenders and a cast-off snakeskin. Another couple built in a piece of carpet found hanging on a tree.

A favorite site with these little birds is a window of an unoccupied room. Finding one with a shutter open or with a broken slat, they will build a home in the corner of the sill. Very sociably inclined, must have been a certain wren who made her nest in such a location, though the room, so far from being unoccupied, was filled during the day with a lot of children, it being, in fact, a country school-house. But the tiny tenant of the window-sill was welcomed and petted, and peacefully made her nest, laid her eggs and brought up her family a close neighbor to a roomful of boys and girls. The shutter was left closed; but the window was sometimes opened, a proceeding which apparently dismayed the little housemother not at all.

This funny story is told by an observer: Some chickadees had made a house for themselves by excavating a cavity in the stump of an old peach-tree. A pair of wrens spied the cozy home, and vainly tried to take possession. At length they gave up the contest, and retired to a bird-house not far away. Before the home of the wrens was finished the young chickadees were ready to leave the nest. Back came the wrens to the old stump, and began preparations for housekeeping, the first step being the filling of the cavity with twigs after the manner of their kind.

Wrens seek a warmer climate in October, and come north again in April. As they eat only insects, never troubling grain or fruit, they may certainly be counted the real friends of the farmer and gardener. As has been said, they are companionable little birds, and in time will become quite tame if rightly treated. They are pert, persevering, plucky and vivacious, decidedly lacking in repose of manner. In truth, Jenny is a good deal of a scold, but this is offset to a great degree by the tuncfulness of Billy.

Now, if you want to coax the wren to build near you, provide something to hold the nest; but remember their aversion to waste space, and let the receptacle be small, thus saving the little workers unnecessary labor. It will also be well to have an opening just big enough to admit the desired tenants, as a precaution against trouble from the English sparrow. Yet he is not so formidable a foe to the plucky little wren as to some larger birds. One writer tells of seeing a pair drive away, one after the other, nine sparrows which were trying to intrude upon their home. After that they were left in peace. C. A. PARKER.

### Souls at Stake

Through the courtesy of the New York and Brooklyn press, attention was promptly called to a statement advanced during my address on January 7th before the Ladies' Branch of City Missions held at LaFayette Presbyterian Church, not only concerning the one hundred and twenty-five thousand dollars then raised by that wicked syndicate formed in St. Louis among the procurers, saloon and dive keepers, but of some of the infamous methods concocted to decoy young girls from their homes to a life of degradation and shame.

Through the above notice hundreds of periodicals, reaching even out to the Western coast, have republished that an-

nouncement. Many thousands of people have become aroused to the enormity and hideousness of this projected traffic, and it is hoped they will stand prepared to do their part, as occasion may require, toward enabling those who are personally impelled (not alone connected with our society) in attempting to stop as far as possible this iniquitous work.

Without thought of competition, solely desiring to lose no time, "The Door of Hope" most earnestly solicits the sympathy and coöperation, financially as well as otherwise, of the public at large, to further its efforts in the preventive and rescue work among unprotected girls during the St. Louis World's Fair.

The sum referred to is reported to have been more than doubled in order to hasten matters in carrying out their evil designs. The utmost precaution has been used upon the part of our workers and co-laborers while obtaining knowledge of some of their diabolical methods and cunning, which we fear has already achieved sufficient to rend many hearts.

No father or mother can afford not to be alarmed in a measure for the safety of their daughter during the next few months, for with sufficient money at their command, numberless agents have been employed and are now at work in various parts of the country.

We have secured space at the Fair, and numbers of workers will be stationed in various places throughout the grounds ready to be of service to any unprotected girl. With kindly tact they will endeavor to obtain her confidence, and caution her concerning the designs of these wicked procurers.

Suitable accommodations for such cases have already been arranged for, where temporary shelter can be secured. "The Door of Hope" and many of its branches, in conjunction with other homes, will be open day and night to receive any who may have already stepped aside from that which is right.

It may require a large amount to accomplish what is proposed, but very judiciously will every dollar be expended. Whatever is done must be done quickly.

All communications or donations will be promptly acknowledged if forwarded to "The Door of Hope," New York City, or direct to Mrs. E. M. Whittemore and Miss Mary B. Cookman, 773 St. Nicholas Avenue, New York City.

Mrs. E. M. WHITEMORE.

### Interesting Facts

Steam-automobiles were first used for handling military equipment by the British in Crimea during 1854. They were also used by both sides in the Franco-Prussian War in 1870, and by Russia against the Turk.

The height of the highest clouds has been determined at the Simla, India, observatory, which is one and one third miles above sea-level, by photogrammetric measurements. Lofty cirrus clouds float at an average height of six miles above the observatory, and cumulus clouds one and one third miles above it. Ordinary clouds are lower than Simla.

A French invention consists in doing away with the running-wheels of electrical cars, and replacing them with slip-pers or skates. The cars are raised on a thin film of water, which is forced under the skates through a jet. A third rail is laid between the two gliding-rails, and a friction-wheel, driven by electric motors, runs on this and furnishes the propelling force to run the car.

The ordinance in force in the city of Birmingham, England, requires that the automobilist shall adjust his speed to necessities of surrounding circumstances, rather than be guided by a fixed limit. The law is: "If any person drives a motor-car on a public highway recklessly or negligently, or at a speed or in a manner which is dangerous to the public, having regard to all the circumstances in the case, including the nature, condition and use of the highway, and to the amount of traffic which actually is at the time, or which might reasonably be expected to be, on the highway, that person shall be guilty of an offense under this act."—American Inventor.

### Just the Very Thing to Do

What's that? Get your neighbor who is not a subscriber to FARM AND FIRESIDE to give you twenty-five cents for a year's subscription, and send it along with your own subscription to FARM AND FIRESIDE. If you will do that little favor for FARM AND FIRESIDE, it will be highly appreciated. That's right, do it.



## Droll Babies in the New York Zoo

THE biggest crowds at the menageries and "zoos" always gather about the cages containing the baby animals. Primarily, interest centers upon them for the reason that they are babies. These little fellows are so quaint, tiny and helpless-looking, and so playful; their every tumble is a laugh expressed in action.

For my part I think the bears are the most interesting. They are such happy-go-lucky, harum-scarum scamps, and so generously endowed with a keen sense of



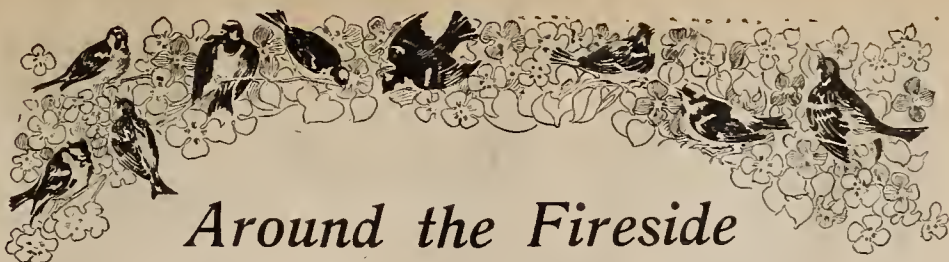
THE ADULATION OF THE PUBLIC IS SWEET TO HIS SOUL

humor, so willing to be made fun of, so anxious to amuse, always ready to cut up and play the fool if they think they can raise a laugh. Your bear is an inveterate practical joker, even when he has no audience; but if ever he can indulge in some prank that will put the public in a good humor, he is mightily pleased with himself. These are the captive bear's weak points—vanity and the love of approbation—and probably the reason why he seems to enjoy life behind the bars; the adulation of the public is very sweet to his cage-pent soul.

This is especially true of bears who enter the prison as cubs, or who are born and brought up before the footlights. An adult bear who has been accustomed to freedom, and has his own ideas as to the proper amusements for bears, sometimes becomes a confirmed pessimist when he finds he cannot convert his audience into bear-food; but cubs rarely lose their love of fun unless indisposed.

A sick bear is quite a different proposition. I once knew a young Himalayan cub—he was not more than a few weeks old when I made his acquaintance—who wasn't as well as he would have liked to be. As soon as this became known he was put into a private cage in a lonely room, to be doctored by his keepers. You never knew so disgusted or so resentful a bear. True, his health did improve, but what a temper he managed to cultivate! He was mad as a hatter at his enforced retirement, and would do nothing but sulk all day in his bed, sucking his paw or complaining; the slightest offer of a familiarity on the part of a keeper was the signal for a regular tirade of bear abuse, ending with a whoop like the cry of a lost soul. But when he was returned to the lime-light of publicity he regained all his natural sweetness of disposition.

A bear, in captivity or out of it, has one habit that is very curious, to say the least—he will sit by the hour sucking his paw or an old bone or a stick of wood, and all the time make a noise like an automobile running at full speed. His enjoyment of this peculiar form of amusement is undoubted, and his endurance for it seems to be unlimited; he can keep up that queer half whine, half growl for an indefinite length of time. Why does he do it? Merely to attract attention. I once watched two young bears in the Bronx Park "Zoo" in New York when they didn't know I was around; the bears' den was otherwise deserted by spectators. The cubs were called Christian and Cyclone. The two were loafing about the den in an aimless sort of fashion, but evidently with designs upon the person of a third bear, who was napping on the curb that surrounds the swimming-bath. Just as matters had about reached a focus, and the other bear was in imminent danger of taking an involuntary swim, a man hove in sight and made for the den. Instantly Christian was on the alert.



## Around the Fireside

"Come on, Cy," he said, eagerly; "let's do our turn, and see what this human thinks of it."

"No," said Cyclone. "I don't want to. Let's push the old fellow into the tank, and hear him snort around when he gets out."

Christian shook his head decidedly. "No, sir-ee; we did that yesterday, and I got cuffed for it. Let him alone, and come along."

"No, Chris! It isn't half so much fun—" began Cyclone; but the near approach of the man caused him to change his mind, and he squatted down in a corner—the one nearest the public walk—and began to muzzle his paw. Christian secured a firm grip on Cy's ear, and chewed that. With their eternal whine-growl commingled they could be heard a considerable distance. The man stopped, and watched them with growing amazement for some time. Eventually he departed, shaking his head dubiously, and muttering to himself. Cyclone, with an expression that said "I told you so" more plainly than words, arose and invited Christian to play tag. A few moments later the older bear was tumbled into the water—entirely by accident, of course.—Louis Joseph Vance.

### Floral Hints

A BLOOMING GIANT CALADIUM.—This is different from the well-known "Caladium esculentum" in that it is larger in every way, and bears flowers resembling a very large calla lily. The leaves, when



THE BABY BEAR LOVES HIS MORNING TUB

grown in proper soil, grow to a length of five feet and a breadth of three feet. The blossoms are a pearly white, changing to a deep cream, and are of delicious fragrance. The plant attains a height of ten



"CYCLONE," THE MOST MISCHIEVOUS BABY IN THE "ZOO"

feet. It is a gross feeder, and should be given a bed prepared from heavy loam and leaf-mold mixed with half their bulk of well-rotted manure. It prefers a moist situation, but lacking that it should be

watered freely. The roots should be started in the house in pots, and kept shifted to larger ones when they get filled with roots. It should not be planted out until all danger of frost is over.

STARTING HONEYSUCKLE HEDGE.—

These are generally used in place of division fences between adjoining properties. Take down the old fence, all but the posts. Cut these off eighteen inches



THE JAPANESE BABY BEAR IS AS VAIN AS A PRETTY GIRL

from the ground, and put a six-inch bottom board on. Run two-by-four scantling along the top flatwise, and cover the intervening space with twelve-inch poultry-netting. This is the foundation.

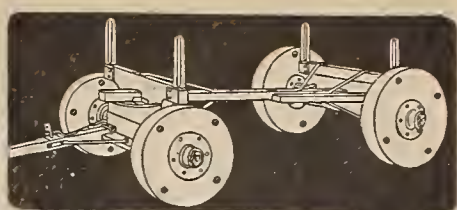
Plant two-year honeysuckle-vines four feet apart, in good, rich soil, and keep mulched summer and winter, with a dressing of bone-meal in mid-summer. Twine the shoots among the meshes. In winter, clip it back to the length desired. After the fourth year it can be trimmed with a grass-sickle quickly. There is no finer hedge. The Japanese varieties are the best.

FOR A SMALL LAWN.—Many persons have room on their lawns or front yards for but one hardy shrub. When this is the case they should plant the "Hydrangea paniculata," as it gives more bloom and makes a finer show for a longer time than any one hardy flower known. There are people who do not succeed with it, but it will generally be found that they have simply dug a hole in the sod and planted it, and it is living a slow starvation. Give it a deeply excavated permanent bed filled with richest soil, mulch it well, and feed bone-meal every two years, a pint to a plant, and keep the grass down for a space of two feet around it. Also, do not be afraid to cut it back severely in the winter, when everything is frozen hard. It blooms on the new growth, and if not severely cut back will give poor panicles. A guide is to cut off at least three fourths of the preceding year's growth.

TO MAKE A HARDY BORDER OR BED.—The making of a hardy border or bed is like building a house—it should have a good foundation. Only those who begin properly at the foundation will have fine hardy plants and bushes. Excavate the soil to the subsoil. If the latter is clay, or what is called "rotten clay," take six inches of it out. This should leave the trench at least two feet deep. Put in three inches of broken stone the size of railroad-ballast in the bottom. Make a soil, if in a limestone country, by mixing equal parts of sods, cut fine, leaf-mold, well-rotted horse-manure and sand. Fill this in the bed so that it will bank four inches above the general level, for surface drainage. In midsummer dig it up, and mix well with the spade, and repeat in the early fall. It will then be ready for the permanent hardy plants. If a border, plant the taller bushes and plants at the back, graduating to the smallest for an edging. Mulch hardy plants summer and winter, and feed bone-meal every two years.—S. A. Hamilton, in Housekeeper.

### Are You Helping?

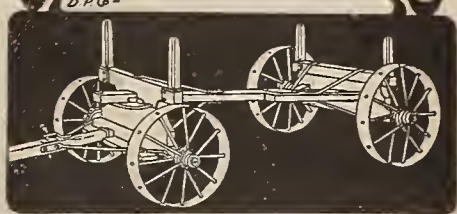
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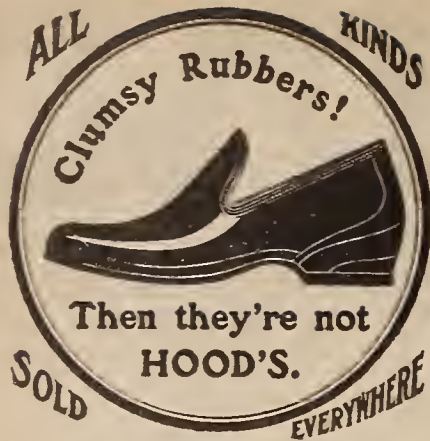
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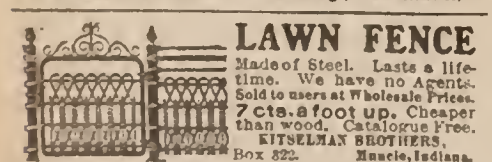
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### Hints on House-cleaning

**W**HERE good help is very scarce one should begin laying plans early, which does much to alleviate the work and worry, and acts as a forearm when the exigencies of the case compel us to roll up our sleeves and pitch in. Even with good help it is better to be one's own overseer, and a memorandum of "good hints" from reliable sources is a strong ally.

After the cleaning of the cellar, which should be done as early as possible, my plan is to begin at the top of the house and work toward the bottom, taking room after room in succession. Be well supplied with the accessories to the work—plenty of clean cloths, brushes, twine, and paper bags, both big and little, for tying up things, tacks, hammer, spirits



## The Housewife

### Scrim Collars and Cuffs

The very noticeable popularity which the scrim turnovers have achieved is sufficient evidence of their merit. This lies not only in their daintiness and beauty, but in the fact that they are simply, quickly and inexpensively made even by the least experienced wielder of the needle. They have also the additional favorable features of being made up in any color or colors to harmonize with any costume, and of laundering without mishap if washable floss is used for the embroidery.

One fact which the would-be maker of these dainty trifles should bear in mind is that all top-collars are now cut considerably deeper than those we have been wearing during the past year. Make the scrim sets at least one and one half or two inches deep. The lower edge and the ends are hemstitched, buttonholed, or caught into a hem by the first row of cross-stitches. The raw edge at the top is then set into a narrow band, which tucks down inside the collar or sleeve, keeping the turnovers in place. The center of the collar is placed directly under the chin, the ends almost meeting at the back of the neck.

The accompanying sampler shows seven designs for embroidering these sets in cross-stitch, any of which may be wrought in one color or a combination of colors. Just now red and blue, red and green, and red, blue and green, are the most widely used shades. The pastel shades—pale blues, pinks, lavenders, etc.—work out beautifully on white scrim, but on the cream or ecru background the dark colors give the richest appearance. For an old lady, black or black and lavender on white is good.

In working these collars and cuffs the design may be carried straight across their length, or may curve up and cross each end, also. It is best to work from each end almost to the center; then if the pattern does not come out just right the break may easily be remedied by substituting a few more stitches in some inconspicuous way. This will insure both ends being alike, no matter what length the collar may require.

The cross-stitches are usually made over two threads of the scrim each way; sometimes three are made at intervals. In four of the designs shown one thread of scrim is left between the crosses in every instance where the pattern does not necessitate a wider space. This scheme may be followed, or the crosses which adjoin may begin in the same space which ended the one preceding. This plan is to be seen in the remaining designs, and the effect of it is to produce a much darker, closer-set appearance.

For working these turnovers any moderately heavy silk floss or luster cotton is desirable, the only point necessary being that it will launder without fading.

MAE Y. MAHAFFY.

### A Neat Belt

A very pretty belt is made of a strip of black taffeta silk five inches wide, and long enough to go around the waist and fasten in a fancy buckle in front. The sides of the silk are turned to form hems on the right side a trifle over half an inch wide. Two rows of French knots are made along these hems with coarse black silk floss. An ornament or buckle is made for the back. The foundation is cut from buckram, and covered with the silk. A piece of buckram five inches long and two inches wide is cut first. Then two oblong pieces are cut out of each half, leaving a strip all around and across the center the same width as the hems of the belt. This is then neatly covered with silk, upon which French knots are placed as on the hems. This resembles a long, slender buckle, and when the belt is slipped through it makes an attractive finish to the back of any belt. Arrange the belt so that

the portion embellished with French knots is most prominent inside the ornament.

A green silk belt of this description with red French knots, and a collar to match, will give a pretty touch of color.

MAE Y. MAHAFFY.

### A Bed of English Daisies

Ten years ago, on moving to my present home, I found a bed of English daisies ("Bellis perennis") growing on the north side of a wing. No new plants have been set or seeds sown, yet hundreds of seedlings come up every spring from self-sown seeds. These are thinned, and when they blossom the more single ones are pulled out. The flowers are cut freely. Each spring the bed is enriched with fertilizer from the barn-yard or hen-house, and it is well watered, and kept free from weeds. For three months of every year the bed is a mass of pink and white blossoms.

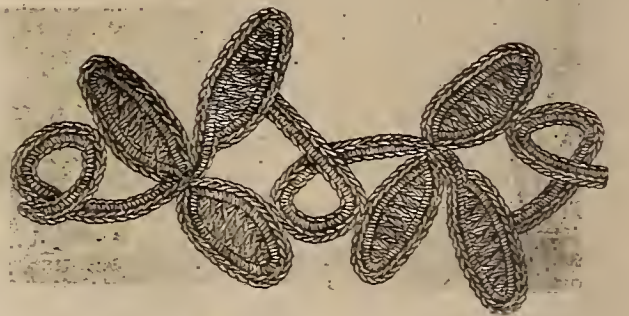
HOPE DARING.

### Crocheted Applique

Abbreviations—St, stitch; ch, chain; s c, single crochet; d c, double crochet; tr, treble.

This design is effective for dress garniture worked with white, ecru or black san silk or linen thread.

Make a ch of 43 st, work on the next sts as follows: A d c in second st from hook. 1/2 tr, 2 tr, 1 long tr (thread over hook twice), 2 tr. 1/2 tr. d c, ch 1, turn. make a s c in the last d c made in previous row. 7 d c in 7 d c. 3 d c in tip of leaf; work the side to correspond with the other one. Now ch 13, and make a leaf like the first one, then work a d c in each of the 3 st at base of second leaf; ch 10, and make the third leaf; draw the two leaves together at the base, make



CROCHETED APPLIQUE

a d c in each of the remaining 33 st of the chain, and fasten off. The joining is done with needle and thread thus: Make a loop in the stem, fasten it, then join loop to the fifth st of two leaves, counting from the base of each leaf, join the end of the stem under the fifth st of middle leaf, as shown. There must be 7 st between the base of the two leaves and the place where loop is fastened, and 5 st between the loop-fastening and the joining of the stem to middle leaf. After the work is completed, lay it right side down on a pad, place a cloth over it, and carefully press with a warm iron.

MRS. J. R. MACKINTOSH.

### Pillow-Top

Take four common-sized embroidered handkerchiefs, and cut one in four pieces on the bias. Join each of these pieces with the hemstitched edge to one solid handkerchief, using beading between.



PILLOW-TOP

Cut the other two in half on the bias, circle out the center, gather, and sew around corners, letting the ends meet the beading on each side. Run ribbon through the beading, and finish with rosettes. Use India linen for the back, and line with silkolene.

FARM AND FIRESIDE is the biggest, brightest, cheapest, best and most practical farm paper published. It's for the farmer and each member of his family.



## A Pretty Rug

**M**OST farmers have a lot of old fertilizer-sacks that are comparatively useless, but they can be made into pretty rugs with a little patience and taste. First rip up the sacks, and wash them thoroughly. Then cut them into strips three inches wide, and pull out the threads running lengthwise, leaving two or three in the middle. You can make a lovely rug by procuring a good fast dye and coloring the strips. It is best to color the strips after they are raveled, because they will become curly, which makes them look better. After they are dried, double them over so that the threads will be on one side, then get an old piece of carpet or cloth the shape desired, and sew the strips on. My mother made one about two by three feet, with a large red diamond-shaped piece in the middle, and all the rest black. Be sure to sew the strips on close. Different shapes and different colors can be chosen. MABEL DOANE.

## Caladium Culture

To be successful in the culture of the caladium you must have rich soil and an abundance of water. The accompanying illustration shows a plant grown in the



A GIANT CALADIUM

summer of 1902 whose largest leaf measured forty-three inches long by thirty-six inches wide. The bulb was a large one to begin with, and was started into growth in a hotbed the latter part of April. When preparing the bed, which was directly over a tile drain, the earth was removed to the depth of eighteen inches, and filled in with moderately rich soil from the garden. This was further enriched by the addition of a bushel of droppings from the poultry-yard, which was well mixed through the soil. After the plant was removed from the hotbed to the permanent bed the ground was never allowed to become dry. The season was an unusually wet one with us, and barrels of water were given this thirsty plant besides. It might not have required so much water had it not been planted over the drain, but the results were very satisfactory. M. E. S. CHARLES.

## With Canned Tomatoes

During the late winter and spring the housekeeper who desires to furnish her table with sufficient variety is often obliged to have recourse to canned vegetables, and of these the tomato is the most valuable and the most generally preferred. Its pleasant acid makes it not only an agreeable appetizer, but an aid in promoting the digestion of fats, and to heavy meat-eaters it is especially useful. Persons who are troubled with acidity of the stomach, however, should avoid too free an indulgence in them. In many households canned tomatoes are served always in the same way—that is, simply stewed for a few minutes, and plainly seasoned—but there are many other delightful ways of serving them. The following recipes will be found very pleasing:

**TOMATO BISQUE WITH RICE.**—Put a pint of canned tomatoes in a stew-pan with half a cupful of water and a slice of onion; cover, and cook slowly for ten minutes, then press through a coarse sieve, and return to the fire; add a pinch of baking-soda. To one pint of scalded milk add a teaspoonful of butter and two tablespoonfuls of boiled rice, and then pour it very slowly into the tomatoes, stirring rapidly. Season to taste with salt and pepper, simmer for a few minutes, and serve at once with croutons.

**EMERGENCY TOMATO SOUP.**—To a pint of strained tomatoes add half a teaspoonful of beef-extract, two tablespoonfuls of butter, three level tablespoonfuls of granulated gelatine, and salt and pepper to taste; stir in three cupfuls of boiling water, and let boil for fifteen minutes. Serve with croutons. This is a delicious soup, and especially valuable when company arrives unexpectedly.

**RICH STEWED TOMATOES.**—Put a quart of canned tomatoes in a stew-pan with two slices of onion, and cook for twenty minutes; then add half a cupful of rolled crackers, three tablespoonfuls of butter, and salt and pepper to taste. Let simmer for five minutes longer, and serve.

**SCALLOPED TOMATOES.**—Butter a baking-dish well, and sprinkle it with fine crumbs; drain the juice from a can of whole solid tomatoes, and place half of the tomatoes over the crumbs in the baking-dish; sprinkle

with salt, pepper, a pinch of cayenne, a little minced parsley, and a tablespoonful of butter cut in little pieces; cover with the remainder of the tomatoes, and finish with crumbs, parsley, seasoning and butter, as before. Bake in a hot oven for twenty minutes, and serve hot from the same dish.

**TOMATO-OYSTER PIE.**—Line a buttered baking-dish with bread-crumbs, and put in a layer of tomatoes from which the juice has been drained; cover with a layer of oysters, seasoning and little bits of butter, then another layer of crumbs, tomatoes, oysters and seasoning, and two tablespoonfuls of butter cut in small bits. Bake in a hot oven until nicely browned. Left-over pieces of meat chopped fine, combined with tomatoes, may also be pleasantly used in this way.

**SALAD IN TOMATO MOLDS.**—To half a canful of tomatoes add four cloves, a slice of onion, a bay-leaf, a teaspoonful of salt, a few pepper-corns, a slice of carrot and a teaspoonful of paprika; simmer for fifteen minutes, then add a tablespoonful of gelatine dissolved in cold water; stir over hot water for a few minutes, or until the gelatine is all dissolved, then strain, and pour into small molds or bowls, and set away to cool. When wanted to serve, turn out carefully on individual plates, and scoop out a hollow in the center of each jelly. Chicken, oyster or any nice vegetable salad will be found very pleasing served in these pretty and palatable little molds.

MARY FOSTER SNIDER.

## Tried and Tested Recipes

These recipes are practical for any housewife:

**EXCELLENT BUNS.**—Take one pint of yeast, two tablespoonfuls of sugar, and a piece of lard the size of an egg; add to this a pinch of salt, and mix thoroughly; let rise until light, then flour the pie-board, and turn out; do not knead; roll until a quarter of an inch thick, and cut with a biscuit-cutter. Place in baking-pans, being careful that the rolls do not touch; let them rise a second time until light, then bake fifteen minutes.

**BUCKWHEAT CAKES.**—One of the best ways in which to make buckwheat cakes is as follows: Take one quart of buttermilk, one teaspoonful of baking-soda, one teaspoonful of salt; mix these together, then take pure buckwheat, mixing it with flour in equal quantities, and make a batter just thick enough for the cakes to turn easily. Serve with good butter, and syrup made of granulated sugar and cream.

**EGG SALAD.**—Boil one half dozen eggs hard; when cold, chop fine with the tender leaves of celery and a handful of green parsley; pour over the mixture a sauce made by stirring together a teaspoonful of salt and one teaspoonful of granulated sugar, into which beat ten tablespoonfuls of vinegar. Serve the salad immediately after adding the sauce.

**WHITE CAKE.**—The following recipe for white cake is one of the best known for a wholesome and practical dessert: Two teacupfuls of butter beaten to a cream, three teacupfuls of white sugar, two teacupfuls of sweet milk, whites of ten eggs, eight teacupfuls of flour and six teaspoonfuls of baking-powder; add one half of the flour, and beat well, then add the other half, the rest of the eggs and the baking-powder. Bake one hour.

MRS. MARY J. FRAZEE.

## A Valentine

Not long ago I was visiting a very sick woman, a friend of mine, who for years past has seen the sunlight only from along the edges of the valley of the shadow. We are both far past the time of lovers' messages, and the day was too dark and cold for us to remember that it was the season for the mating of the birds, so we did not recollect that it was St. Valentine's Day until a daintily written note, headed "A Valentine," was handed to my friend. Her eyes were very glad and bright when she passed it over to me. After I had read it, the simple lines in black and white seemed glorified into "apples of gold in pictures of silver," and I well understood when the dear voice said, gently, "That is the sweetest valentine I ever received."

The writer of it, a lovely young matron, who has three fine children, a splendid young husband, and everything in environment which can make life a grand, sweet song, had taken time and thought to write a little message of sincere love to the shut-in so long deprived of the social contact she once had prized. She told her that if she were ever able to accomplish any good in her life—and the prospects are that a bountiful harvest of good deeds are to be gathered by her—the patient invalid's influence would be largely to account for it.

I could see how the radiance of the joy of being so remembered lit up that sick-room, and then I wondered anew why it is that we lock up love and appreciation to shrivel unexpressed in our own bosoms instead of winging them on words to bless and gladden wherever they might. MRS. HENRY WIGHT.

The best investment a farmer can make is twenty-five cents for a year's subscription to FARM AND FIRESIDE.

## Suggestions

When it is necessary to feed the cats in the house, a newspaper spread on the floor under the dish will save grease-spots and the mopping up of milk.

When peeling onions, let the skins fall on a newspaper. They can be gathered up, paper and all, and burned, and there will be no dish tainted with them.

In using a knife to open a glass-topped fruit-jar, be very sure to put the knife under the rubber, otherwise pieces of the glass may be chipped off and the top spoiled.

The stiff covers of an old book—an account-book with the leaves torn out—make an excellent portfolio. It is useful for keeping lists of things to be remembered, newspaper clippings, cooking-recipes, letters, or anything one wishes to have handy and yet out of the way.

For out-of-door work, when it is not extremely cold, denim mittens are good to work in, being very light and pliable, and so not clumsy. They are also much warmer than one would suppose. Made by a good pattern they will wear some time, especially if reinforced on the palms.

When the groceryman comes but once a week it is almost impossible to remember every article which is needed unless a list is kept. A pad of paper tacked to the pantry door, with a string and pencil attached, is always ready, and when anything is seen to be almost used, a memorandum may be quickly made of it.

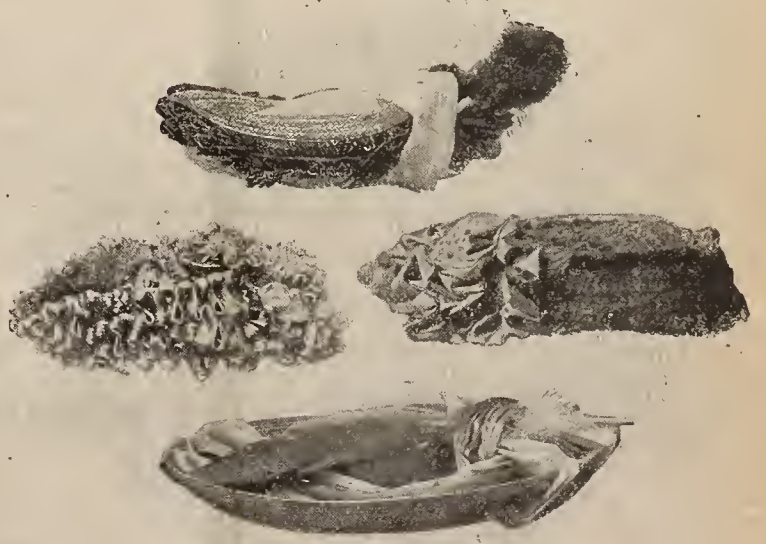
If you frequently come across pieces of poetry which you would like to memorize, but have not the time, try cutting them out and putting them in a corner of your mirror, slipping them in between the glass and the frame. Then as you are dressing and combing your hair your eyes can rest on the clipping, and you will find it very easy to learn the lines.

Many people, when cutting up apples to cook, pare the apple, then cut it off the core. This is a wasteful way, and it takes longer than to cut the core out of the apple. Cut the apple in quarters, then carefully remove the core from each quarter, taking as little of the apple as possible, then take off a thin peeling, using a sharp knife. If you do not believe this a more economical way, try doing an equal number of apples each way, and note the two amounts of refuse you have left.

Peanuts are very nutritious and wholesome if one can digest them. It is better to eat them at meal-times instead of nibbling at them between-times. They are delicious eaten with wheat bread and butter. There is a great difference in peanuts. I have found one dealer who always has very nice ones, crisp, tender and cooked just right. One can buy the nuts in quite large quantities, and if they are kept in a tightly closed tin pail in a dry place they will be good until they are all used.

When there have been hot dinners all the week, something simple is just as good for Sunday, and the housekeeper can have a rest-day as well as the other members of the family. Warm brown bread, either freshly baked or steamed over or toasted, and eaten with cream, is a dish fit for a king, and it is easy to prepare. If a more elaborate dinner is necessary, let the supper be simple. Pop-corn with milk is excellent. Sunday is usually a day of comparative quiet, and it is a mistake to eat as heartily as if one were engaged in active work.

The best way to keep skirt and shirt-waist on friendly terms is by means of buttons and buttonholes.



A GROUP OF PRETTY HATS

A stay-piece needs to be stitched on the back at just the right height, and the buttons will not then pull out. Have one button in the middle, and one on each side about four inches from it. Then with buttonholes in the skirt to match it is no bother at all to fasten skirt and waist together. Care must be taken to have the buttons in the right place, so as to draw the waist down snugly and bring the belt to the waist-line. The buttons should be thin, flat ones, so they will not show through the belt.

SUSAN BROWN ROBBINS.

## PATTERNS

We cannot furnish patterns of fancy-work illustrated on The Housewife pages of FARM AND FIRESIDE. We furnish dress patterns only, and these are illustrated on the "How to Dress" and Fashion pages.



## Selections

### A Dweller with the Past

Alone in the sunken doorway  
She stands while the teams go by;  
Herself and her low-roofed hovel  
Sunk deep in the fields of rye.

The frugal meal on the table  
She shares, in her thoughts, with him  
Who dropped from the minds of the  
passers  
Far back where their youth lies dim.

She keeps a song of her crooning.  
And the mother-smile she wore;  
For the feet of the dear ghost-children  
Go in and out of the door.

In a nameless row in the churchyard  
Long years have they been asleep;  
But here, on her bed, the pillows  
The prints of the wee heads keep.

She sees, with the day's work ended,  
A group on the low door-stone;  
We see but an old, old woman,  
Who lives in her hut alone.  
—Cora A. Matson Dolson, in Munsey's.

### Hymns that Have Helped

WILLIAM T. STEAD, in his celebrated work, "Hymns that Have Helped," said that when "Sunday at Home" (a British publication) took the plebiscite of thirty-five hundred of its readers as to which were the most popular hymns in the language, the "Rock of Ages" stood at the top of the tree, having no fewer than three thousand two hundred and fifteen votes.

"Rock of Ages" was written by August Montague Toplady, a Calvinist vicar of a Devonshire (England) parish.

Toplady put much of his time and energy into the composition of controversial pamphlets, on which the good man prided himself not a little. Just by way of filling up an interval in the firing of political broadsides, he wrote and sent off to the "Gospel Magazine" of 1776 the hymn "Rock of Ages." But to-day the world knows Toplady only as the writer of the four verses.

The following is the hymn in full:

Rock of Ages, cleft for me,  
Let me hide myself in thee!  
Let the water and the blood  
From thy riven side which flowed,  
Be of sin the double cure,  
Cleanse me from its guilt and power.

Not the labors of my hands  
Can fulfil thy law's demands.  
Could my zeal no respite know,  
Could my tears forever flow,  
All for sin could not atone:  
Thou must save, and thou alone!

Nothing in my hand I bring;  
Simply to thy cross I cling;  
Naked, come to thee for dress;  
Helpless, look to thee for grace;  
Foul, I to the fountain fly;  
Wash me, Savior, or I die!

While I draw this fleeting breath—  
When my eye-strings break in death—  
When I soar to worlds unknown—  
See thee on thy judgment throne—  
Rock of Ages, cleft for me,  
Let me hide myself in thee!

### Value of the Guinea

Few people realize the worth of the odd but valuable guinea. In the East they command good prices from people who are able to pay for and appreciate delicious viands, for the meat of the guinea is not unlike that of quail or prairie-chicken.

The eggs of the guinea-hen, which lays about one hundred and twenty a year, are richer and more nutritious than chickens' eggs, although not so large. Guineas are great foragers, and will "support" themselves eight months of the year, but it is best to feed them close to the hen-house every evening, so as to insure their roosting at home. They are good "watch-dogs," and will give battle to any enemy that threatens them, and will even fly into the air to fight the hawk. The noise they make frightens the hawk, and puts all the fowls on the place on their guard.

It is puzzling for the amateur to tell the males from the females. Bear in mind, however, that the ladies of the flock are the most persistent talkers, and cry "come back," or, as others interpret it, "pot luck," or "buckwheat," that the male's voice is pitched in a lower and different key, and he calls "quit," and runs on the tips of his toes; that his comb and wattles are larger than those of a hen his age. An old female guinea will have wattles as large as a young male's, and therefore it is best to train the ear to distinguish the different calls, and not the difference in the style of their walking.—Religious Telescope.

# FREE TRIPS to the Great St. Louis WORLD'S FAIR

## Will Be Given by Farm and Fireside to its Club-Raisers Without Cost

A big cash commission will be paid on every subscription you take, in addition to the above free trips to the World's Fair.

To each of the five persons who send the greatest number of subscriptions to Farm and Fireside between now and September 15, 1904, Farm and Fireside will give a free ten days' trip to the great St. Louis World's Fair (during the month of October), paying all expenses, including railroad fare, hotel bills, admissions, and all necessary expenditures from the time you leave home until you return.

If you win a trip, and don't want to take it, you may have the equivalent in cash instead, not to exceed one hundred dollars.

## Write to-day for full particulars

and while you are waiting to hear from us, start in to get up your club, taking each subscription to Farm and Fireside at twenty-five cents a year. You will be well satisfied with the commission we will allow you. Don't wait, or some one will get ahead of you. We will send you special subscription blanks and full instructions—everything you need to win a prize trip.

### It will not take very many subscriptions to win the prizes

You will be surprised when the time arrives to see how easily these magnificent trips to the great St. Louis World's Fair were won, and what a very small club, comparatively, it required to secure these prizes. Now, don't think some one has a better chance than you—you have as good a chance as anybody. Don't stop to study over it, but get right out and hustle a little, and you may wake up to find yourself one of the lucky ones. Be quick.

## CONDITIONS

1. Any person can enter this contest.
2. All subscriptions to Farm and Fireside must be taken at twenty-five cents a year.
3. A liberal cash commission will be paid for each subscription sent in by contestants; this is in addition to the free trips. Get your friends to help you.
4. You must mark each list you send in "World's Fair Contest," so that no mistakes are made in crediting the same to your account.
5. Each successful contestant will have ten days at the fair (during October), all necessary expenses paid from the time you leave home until you return. Won't that be nice?
6. The contest is limited to the United States only.
7. Contest closes September 15, 1904.
8. In case of a tie, the prize will be one hundred dollars and equally divided.
9. If you don't want to take the trip you may have the equivalent in cash not to exceed one hundred dollars.

*No one connected with our establishment, either directly or indirectly, and no one living in Springfield or Clark County, Ohio, will be permitted to enter the contest, and the contest will be conducted in the fairest manner possible.*

## How to Win a Trip

You don't have to send many subscriptions in order to get a free trip to the greatest fair the world has ever seen.

Start right out among your friends and tell them for what you are trying, and they will all help you. Get your friends first, and then your friends' friends, and so on.

Write to your friends at a distance and tell them all about it, and say to them that you want their help and any subscriptions that they can send to you. They will help you.

It is not going to take very many subscriptions to win a trip. It will be comparatively easy. You see you have nearly six months in which to work. You can do much in that time. October will be the nicest month to visit the exposition. Now hustle, and you'll win.

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ADDRESS FARM AND FIRESIDE SPRINGFIELD, OHIO



## Sunday Reading

### The Olive-Trees

In Gethsemane, when night winds blow,  
The gray old olive-trees droop low;  
The twilight hour has passed away,  
And stars shine forth in bright array.

But deepening gloom enshrouds the place,  
For lo! with upturned pallid face,  
The Savior prays in anguish prone,  
Bearing his bitter grief alone.

Cold dews fall on the gnarled old trees,  
And seem to weep as God's eye sees;  
The whispering breezes fainter now,  
Blow softly on his fevered brow.

No earthly friend is near to embrace  
Or wipe the drops from his pale face;  
And they who promised him to keep  
Fast watch, so soon are lost in sleep.

He suffers as the hours roll by  
Beneath Judea's midnight sky;  
While throes of anguish shake his frame  
So crushed with earth's dark sin and shame.

Oh, rough old trees, droop low, droop low,  
Gazing on such unfathomed woe;  
Bend low your boughs of somber gray  
To him who walks this weary way.  
—M. E. Carmichael, in The Baltimore Methodist.

### A Girl Drunkard

THE superintendent of a New York home recently related the story of her own experience in rescue-work so wonderful and so encouraging to wretched victims of sin that it ought to be made public. The story in substantially her own language was as follows:

"I was sent for one morning many years ago by one of the judges of the court, who had before him a girl sixteen years of age. The girl's father had caused her arrest, and had appealed to the court to sentence her to some home as an incorrigible.

"The history of the girl was this: At twelve years of age she had been put to service in the dining-room of a saloon as a waitress. Her duties required her to serve liquors, and she acquired a passion for drink, and in a short time became a drunkard.

"I never saw a human being that loved liquor as she did. She could drink down a glass of clear whisky with the greatest relish, and she had absolutely no control over her appetite. At sixteen she was a confirmed drunkard and a street-walker. She was devoid of any moral principle, and had a perfectly insane temper.

"The judge heard the case, and sentenced her to the home of which I was superintendent. When she learned her destiny she flew into an uncontrollable rage. She screamed and fought and cursed like a demon. She had to be taken to the home by main force, and when she got there we were at our wits' end what to do with her. She was perfectly lawless, desperately ugly, and her manner was more like a demon than a human being. We tried all sorts of treatment for her—we tried to win her by love; we tried to reason with her; then we tried punishing her—in fact, we exhausted our resources all to no purpose. For three years that girl kept our home in a turmoil. Nothing we could do had any effect upon her. She attended our gospel services, but to all appearances they had no influence over her.

"At the end of three years a change came over her. She began to pray and to believe in God. After that we had her under control, and we sent her out to service in a Christian family on a farm in a neighboring state. She was a small girl, not very strong, but she took hold of the heavy work of a servant's place in a country home with an amazing vim. It seemed as if she couldn't do enough for her employers.

"But the work was too much for her, and after the first year she returned to us quite worn out and broken down. Then she took up fancy-work, and became an expert. The finest kind of work seemed to come perfectly natural to her.

"When the term of her sentence expired, at twenty-one years of age, she left our home, and supported herself by doing the fancy-work learned in the home. She was then one of the most lovable, sweet-mannered, kind-hearted, gentle girls that I ever knew. We all loved her, and she used to come and instruct the other girls in fancy-work. She had grown to be a very handsome girl, with a fair complexion and a beautiful face.

"A young man out of an excellent family in our city became interested in her,

and finally married her, and took her to his father's home, where she was admitted on equal terms with the other sons and daughters, of whom there were several. She became a favorite with them all, and the father-in-law speaks of her endearingly as his 'little kid.'

"You asked me if I knew of any cases of girls rising from a life of shame to respectable womanhood, and my answer is this true story of a girl who is now the mother of a dear little girl, and who is one of the loveliest Christian characters of my acquaintance. It is one of many evidences that there is no limit to the power and grace of God.

"Jesus is 'able to save to the uttermost all that come unto God by him.' What a refuge the Lord is to every sinner who will flee to him for help!"—The National Advocate.

### Hungry for Kisses

Two young girls had gone to the orphan-asylum one Sabbath afternoon to teach in the Sabbath-school there as substitutes for regular teachers who were absent. One of them taught the infant class, and when the lesson was over a little blue-eyed tot caught hold of the girl's dress, and looking up, whispered, pleadingly, "Please, teacher, won't you kiss me?"

"To be sure I will, you dear baby!" the girl cried, and dropping down on one of the low benches, she drew the child close, and kissed her again and again.

In an instant the others swarmed about, boys and girls alike holding up hungry faces for kisses. The girl's eyes filled with quick tears as she looked into the eager little faces. Her friend, who had taught an older class, stood at the door of the infant-room, looking on, half laughing, half impatient.

"Do come along, Helen," she called at last; and as Helen gently put aside the little warm, clinging fingers and joined her, the other girl exclaimed, with a touch of scorn, "I don't see how you could have all those mussy little things hugging and kissing you. See how they've tumbled your dress!"

Helen glanced down at her dress. It surely had suffered from the little loving hands, but her eyes were shining through a mist of tears as she gently answered, "You know they have no mothers to kiss them, Gertie." Somehow Gertie could find no answer for that, and as the two reached the street, Helen went on, "Did you notice Sadie Burns, the little brown-eyed thing with the blue veins on her forehead?"

"The one that clung to your dress to the last minute?"

"Yes, that was Sadie. The matron told me that one day when Sadie was sick a lady who is very fond of her, and who often visits at the asylum, came to see her, and brought a little puppy that she thought would amuse her. Of course, the child was delighted with the puppy, and at last the lady said to her, 'If you could have just what you want most of all for yourself, Sadie, what would it be?' She thought that the little thing would like the puppy, and she meant to give it to her if the matron was willing; but Sadie put the dog down at once, and stepping close to the lady, leaned on her knee, and looking up at her with those big, solemn brown eyes, she said, 'I'd like most of anything to sit in your lap a few minutes just as if I was your own little girl!'"

Gertie turned impulsively to her friend. "I never imagined that they felt so, Helen," she cried, remorsefully.

"They don't all, of course," Helen answered; "but I know that some do, and I cannot bear to think of little children going hungry for kisses. I can't give them mother kisses, but I do the best I can, even if my dress does suffer a little."—Christian Endeavor World.

It is a noble sight to see an honest man cleave his own heart in twain and fling away the baser part of it.—Charles Reade.

### Boys and Girls

We are trying hard to get a million subscribers to FARM AND FIRESIDE. We believe that if each one of the boys and girls who read FARM AND FIRESIDE were to help it would be easily and quickly done. We will pay you handsomely for getting up clubs, and it is so easy to get up clubs to FARM AND FIRESIDE. Write to-day, and we will tell you all about it. Better get up a club of five or six while you are waiting to hear from us. FARM AND FIRESIDE is twenty-five cents a year. We shall be more than pleased if you will. Let's hurry. Time goes by, and it won't come back to us.

# Nature's Greatest Cure For Men and Women

**Swamp-Root is the Most Perfect Healer and Natural Aid to the Kidneys, Liver and Bladder Ever Discovered**

### Swamp-Root Saved My Life

I received promptly the sample bottle of your great kidney remedy, Swamp-Root.  
I had an awful pain in my back, over the kidneys,



MR. T. S. APKER.

and had to urinate from four to seven times a night, often with smarting and burning. Brick-dust would settle in the urine. I lost twenty pounds in two weeks, and thought I would soon die. I took the first dose of your Swamp-Root in the evening at bedtime, and was very much surprised; I had to urinate but once that night, and the second night I did not get up until morning. I have used three bottles of Swamp-Root, and to-day am as well as ever.

I am a farmer, and am working every day, and weigh 190 pounds, the same that I weighed before I was taken sick. Gratefully yours,

Sec. F. A. & I. U. 504. T. S. APKER,  
April 9, 1903. Marsh Hill, Pa.

There comes a time to both men and women when sickness and poor health bring anxiety and trouble hard to bear; disappointment seems to follow every effort of physicians in our behalf, and remedies we try have little or no effect. In many such cases serious mistakes are made in doctoring, and not knowing what the disease is or what makes us sick. Kind Nature warns us by certain symptoms, which are unmistakable evidence of danger, such as too frequent desire to urinate, scanty supply, scalding irritation, pain or dull ache in the back—they tell us in silence that our kidneys need doctoring. If neglected now, the disease advances until the face looks

pale or sallow, puffy or dark circles under the eyes, feet swell, and sometimes the heart acts badly.

There is comfort in knowing that Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, fulfils every wish in quickly relieving such troubles. It corrects inability to hold urine and scalding pain in passing it, and overcomes that unpleasant necessity of being compelled to get up many times during the night to urinate. In taking this wonderful new discovery, Swamp-Root, you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered.

### Swamp-Root a Blessing to Women

My kidneys and bladder gave me great trouble for over two months, and I suffered untold misery. I



MRS. E. AUSTIN.

became weak, emaciated and very much run down. I had great difficulty in retaining my urine, and was obliged to pass water very often night and day. After I had used a sample bottle of Dr. Kilmer's Swamp-Root, sent me on my request, I experienced relief, and I immediately bought my druggist two large bottles, and continued taking it regularly. I am pleased to say that Swamp-Root cured me entirely. I can now stand on my feet all day without any bad symptoms whatever. Swamp-Root has proved a blessing to me.

Gratefully yours,

MRS. E. AUSTIN,  
19 Nassau St., Brooklyn, N. Y.

**To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy, Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail.**

**SPECIAL NOTICE.**—So successful is Swamp-Root in promptly curing even the most distressing cases of kidney, liver or bladder troubles, that to prove its wonderful merits you may have a sample bottle and a book of valuable information, both sent absolutely free by mail. The book contains many of the thousands upon thousands of testimonial letters received from men and women cured. The value and success of Swamp-Root is so well known that FARM AND FIRESIDE readers are advised to send for a sample bottle. In sending your address to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say you read this generous offer in the FARM AND FIRESIDE.

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**360 Days Approval Test**—We guarantee under a \$20,000 bank bond. If a Kalamazoo does not satisfy you in every way, send it back and we return every cent you paid. We pay freight. Can we make a fairer offer! We are selling thousands of both steel and cast iron stoves and ranges in all parts of the country, and can refer you to pleased customers in your own neighborhood. New patterns, large square ovens and guaranteed fire backs. All blacked and polished ready to set up. Send postal for Approval Offer and Catalog No. 183.

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We fit all our ranges and cook stoves with our patent oven thermometer which makes baking easy.

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**Direct from our own Factory.**

Why pay your dealer from \$5 to \$40 more for a stove or range, when you can buy direct from our factory

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all the evil effects of sweeping their carpets and fine rugs with a corn broom, they would not let a day pass without procuring a "CYCO" BEARING

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Substantially made from selected material and is handsomely finished. Has Removable Bottom, rendering it easily cleaned and contributes to long life of machine. Top rubber is held by arms instead of ears and is easily operated or lifted from the machine, and washes faster, easier, and with less wear on the clothes. For the purpose of introduction we have a plan that will enable you to secure a SNOW WHITE WASHER without cost, and we will pay the freight. Write for particulars.

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**GEM INCUBATOR CO., BOX 38, DAYTON, OHIO**



MYRTLE SHIRT-WAIST

MANY changes have been made in women's wearing apparel for this spring and summer, both in style and in material. We will therefore show from time to time the various designs, from the plainest to the most elaborate, so that our readers may keep in touch with Dame Fashion's latest whims and fancies.

**Blouse Waist with 1830 Yoke and New Tunic Skirt**

The woman who selects this model for her best Easter gown may have the happy consciousness that she has chosen a costume which possesses an unusual number of the new features in the new fashions. The waist is made with an 1830 yoke back and front. The collar and



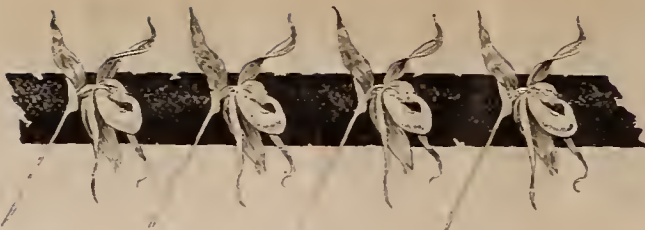
CECIL SHIRT-WAIST

yoke are in one piece, as are also the tab fronts. The yoke is made with a seam on the shoulder, and finished with three rows of shirring. The body of the waist is a blouse, with two narrow box-plaits down the center front. At the back it is slightly bloused. The waist is finished



BERTHA DRAWERS

with a deep girdle, and the full sleeve, shirred at the top, ends in a very deep close-fitting cuff. The skirt is the newest variation of the tunic model. The upper flounce is tucked all the way around, and the upper portion of it is attractively shaped to the figure. In addition to the skirt being made with three flounces, it has two graduated box-plaits down the center front, which give



**How to Dress**

a becoming length of line to the figure. Though the upper part of the back of the skirt is tucked, it is made to simulate a habit-back. In length the skirt falls upon the floor all around, and is made with an extra dip at the back. Barege, etamine, voile and eolienne cloth are all materials which will adapt themselves prettily to this style of costume. The pattern for the Blouse with 1830 Yoke, No. 254, is cut for 32, 34, 36 and 38 bust measures. The pattern for the New Tunic Skirt, No. 255, is cut for 22, 24, 26 and 28 waist measures.

**Cecil Shirt-Waist**

A useful shirt-waist for any woman to own is the Cecil. Though it is counted among the tailor-made shirt-waists, it is not severely plain. The slot-plaits and the stitched straps and the buttons dress it up a bit. The back of the waist is plain, trimmed merely with straps, to correspond with those in front. This waist would look attractive in any of the mercerized cottons. The straps are generally of the self material, though a charming effect may be produced by having the waist made of fawn-colored linen, with the straps of tan-colored linen elaborately embroidered in white mercerized cotton. The pattern for the Cecil Shirt-waist, No. 86, is cut for 32, 34, 36 and 38 bust measures.

**Frances Tea-Coat**

The tea-coat is the successor of the dressing-sacque. It is a distinctly negligee garment. The plaited Frances model will be found attractive in many materials. It will look equally well in albatross, louisine silk, French flannel or silk flannel. It is made the same back and front, the fullness drawn into the waist-line by ribbons. The deep lace collar has stole-ends in front. The sleeve is a plaited bell-sleeve, the plaits widening out gracefully below the elbow. A band of lace matching the collar finishes the sleeve. In pale lavender this tea-coat is effective with the collar of white lace. It is also charming in ivory-white with a hair-line stripe of black and the lace of a rich cream tint. The pattern for the Frances Tea-coat, No. 186, is cut for 34, 36 and 38 bust measures.

**Myrtle Shirt-Waist**

This smart-looking tailor-made shirt-waist is good style for the athletic summer girl. It is made of cotton vesting—that material which is not only extremely fashionable this spring, but which wears well and launders to perfection. The waist shows the same box-plaits in the back as in the front. It has a broad-shouldered effect and a slight blouse at the waist-line. The new cotton cheviots come in a variety of attractive colors; in white with a green design they are very effective. The buttons are a feature of waists of this sort, and the larger they are, the more fashionable. They look well in gun-metal or in pearl, with the wearer's initial hand-painted. The pattern for the Myrtle Shirt-waist, No. 85, is cut for 34, 36, 38 and 40 bust measures.

**Bertha Drawers**

In order to take away any extra fullness from about the waist and hips the Bertha drawers are made on a short, carefully fitted yoke. They are not extravagantly full. The ruffle at the knee gives the correct flare, and is headed with ribbon-run beading, the ribbon tying at the side in a rosette bow. The ruffle may be plain or elaborate—simply finished with a hemstitched hem or trimmed with groups of tucks and an edge of lace or lace applique. The pattern for the Bertha Drawers, No. 57, is cut medium and large.

**High-Necked Bertha Effect**

A novelty which bears a Parisian stamp shows a little shoulder-cape built like a bertha. It is high in the neck, is cut off at the bust-line, and is finished with a ruffle of silk. It buttons in the back. The front is trimmed with a silk applique put on flat. The bertha is undoubtedly one of the most fashionable of summer features, and all sorts of tricks are tried to simulate it upon gowns that have no bertha, and particularly upon the old shirt-waists, to make them look like new. A bertha fresh-



FRANCES TEA-COAT

ens up an old shirt-waist wonderfully, and if it can be arranged upon a blouse of silk it gives it a certain tone that is unmistakably fashionable and becoming to the figure.

A French modiste with many a little trick of dressmaking is taking wide needlework, as fine as her patron can afford, and is gathering it into a ruffle. This she sews along the yoke of a wash shirt-waist, outlining the yoke in pointed fashion. The effect is lovely, but of course it can be done only when the waist opens in the back.

One of the finest of silk blouses is built of percaline blue louisine. It is buttoned down the back with Dresden buttons. The front is tucked as to the yoke. Out



BLOUSE WAIST WITH 1830 YOKE AND NEW TUNIC SKIRT

lining the yoke is a deep flounce of Mechlin lace. The sleeves are finished with a wide cuff of chiffon and Mechlinina lingerie cuff.

The high-necked bertha effect is seen not only upon the wash gowns, but on silk blouses, also.—Kansas City Journal.

**PATTERNS**

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired. Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.



## Prize Puzzles

We Want to be Neighborly, and so Invite all of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.



## THE STATES PUZZLE

Here are Eight Questions, the Answer to Each Being the Name of One of the United States. Can You Give the Correct List?

- 1—What state contains a girl's name and a common gardening-implement?
- 2—What state combines a preposition and the name of the goddess of a certain sport?
- 3—What state should be the dairyman's delight?
- 4—What state produces an unpleasant sound?
- 5—What state recalls the memory of a certain unfortunate battleship of the United States?
- 6—What state should be the happiest in the union?
- 7—What state's name designates a large body of water?
- 8—What state should be the father of the country?

—M. F. W.

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before May 1st.

## ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a fine "Atlas of the World" will be given for the first correct list of answers received from each state and territory. This means an atlas for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize,

giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the atlases will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

## ANSWERS TO PUZZLES IN THE MARCH 15th ISSUE

### The Wheat-Field Puzzle

- |          |           |
|----------|-----------|
| 1—Blade. | 4—Stalks. |
| 2—Beard. | 5—Sheaf.  |
| 3—Grain. | 6—Shock.  |

The cash prizes are awarded as follows:

Man's cash prize, two dollars—E. H. Lane, Cove, North Carolina.  
Woman's cash prize, two dollars—Ellen G. Kemp, Whitehouse, New Jersey.  
Girl's cash prize, two dollars—Dona McNamee, West Point, Mississippi.  
Boy's cash prize, two dollars—Nap. Covey, Bentonville, Arkansas.

As a consolation prize a copy of that ever-popular book, "Dick Onslow," is awarded the following persons, whose lists were the first to reach us from their respective states:

Arkansas—John J. Landers, Benton.  
California—Mrs. E. A. Howe, Dutch Flat.  
Canada—Ontario—Leota E. Bingleman, Walsh.  
Quebec—W. B. Meldrum, Hull.  
Colorado—E. V. McGrew, Wray.

## Conundrums

Why are old people prolix? Because they dilate.  
What are the most difficult ships to conquer? Hard-ships.  
When is a man duplicated? When he is beside himself.  
Why is the letter "w" like scandal? Because it makes ill will.  
What is the best way to keep a man's love? Not to return it.  
Why was the dumb-waiter returned? Because it didn't answer.  
What is that which is invisible, yet never out of sight? The letter "s."  
Why is an umbrella like a pancake? Because it is seldom seen after lent.  
Why is a comprehensive action an affectionate one? It "embraces" everything.  
Why is a fisherman's the most lucrative employment? It is all "net" profit.  
Why are fixed stars like wicked old men? Because they scintillate (sin-till-late).  
Why is a wedding-ring like eternity? Because it has neither beginning nor end.  
Why does a dressmaker never lose her hooks? Because she has an "eye" to each of them.  
Why does the sailor know there is a man in the moon? Because he has been to sea (see).  
Why is a steam-engine at a fire an anomaly? Because it works and plays at the same time.  
What is the difference between a funny fellow and a butcher? One deals out wit, the other wittles.  
How did Jonah feel when swallowed by a whale? He was down in the mouth and went to blubber.  
Why have chickens no fear of a future state? Because they have their next world (necks twirled) in this.  
Why is it almost certain that Shakespeare was a broker? Because no man has furnished so many stock quotations.  
What is the difference between photographing and the whooping-cough? One makes facsimiles, and the other makes sick families.  
If you saw a house on fire, what three celebrated authors would you feel disposed at once to name? Dickens—Howitt—Burns.

## A Poem by Twenty Poets

Why all this toil for triumph of an hour?—Young.  
Life's short summer, man's flower.—Dr. Johnson.  
By turns we catch the vital breath and die.—Pope.  
The cradle and tomb, alas! so nigh.—Prior.  
To be better far better than not to be.—Sewell.  
Though all man's life may seem a tragedy.—Spencer.  
Your fate is but the common fate of all;—Longfellow.  
Unmingled joys here to no man befall.—Southwell.  
Live well; how long or short, permit to heaven;—Milton.  
They who forgive most shall be most forgiven.—Bailey.  
Then keep each passion down, however dear;—Thompson.  
Thou pendulum betwixt a smile and tear.—Byron.  
Soar not too high to fall, but stoop to rise;—Massinger.  
We masters grow of all that we despise.—Cowley.  
Think not ambition wise because 'tis brave.—Davenant.  
The paths of glory lead but to the grave.—Gray.  
How long we live, not years, but actions, tell.—Watkins.  
That man lives twice who lives the first life well.—Herrick.  
The trust that's given guard, and to yourself be just;—Dana.  
For, live we how we can, yet die we must.—Shakespeare.  
Have your friends name the authors as you read the lines.

## The Leader

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MR. BAXTER was busy at work in the shop at the end of his garden, when suddenly the door was flung violently open, and his three small sons came trooping in. They were William, Robert and Albert—familiarly known as Billy, Bobby and Bert—twelve, ten and seven years old, respectively, and as irrepressible a trio of youngsters as ever wore their stockings through at the knees.

Mr. Baxter laid aside his chisel, and calmly awaited further developments. His eldest son had something tightly clutched in his arms, which he deposited upon the work-bench with a sigh of relief. The "something" quickly untangled itself



BILLY, BOBBY AND BERT

into the form of a full-grown cat. She leisurely stretched herself, and then began to look around to see what sort of place she had gotten into.

Not wishing to have his father question him, Billy broke forth in a torrent of explanations. "I got her down at the corner," he began, breathlessly. "Jim Ball and a crowd of fellows were going to tie something to her tail, and I told Jim if he did I'd—I'd—"

"Billy was awful spunky," asserted Bert, with decision. "He just ups and tells Jim Ball if he hurt that poor cat he'd—he'd 'put another face on him!' And then—"

"They got fighting—just awful," interposed little Bobby, eager to contribute his share of the narrative. "And—and Billy hit Jim right in the eye, and he cried like everything. Then Billy got the cat, and we ran home. And papa, ain't we dare keep her?" he pleaded. "Ain't we dare?"

"Yes, papa, ain't we dare?" asked Billy and Bert in unison.

Father Baxter found himself in a predicament. He was well aware of his wife's pronounced dislike for any and all kinds of cats. She had often declared that she would never have one near the place. "Well, boys," he said, finally, meanwhile stroking the cat, which purred contentedly under his touch, "this seems like a pretty nice sort of a puss, but your mother might object to our keeping it. So you had better run along and ask her about it."

Billy once again took the cat in his arms, and headed for the house, followed by his two younger brothers. At first their entreaties were met with a firm refusal, but after a while puss decided to plead for herself. She jumped into Mother Baxter's lap, and rubbed her soft, furry ears against the lady's hand in her most bewitching manner—and no cat ever purred in a more winning way.

"There's no doubt of her being very affectionate," conceded Mother Baxter, inwardly delighted, but reluctant to confess it, "and I never saw a more intelligent face on a cat, but—" She paused, and the look of rising hope that had appeared on the faces of her offspring changed to a look of blank despair. "Well, children," she continued, "if you'll promise not to make me any trouble we'll keep the cat for a few days, and if Tabby behaves herself during that time, perhaps we may keep her always. Now—"

At this juncture Mother Baxter was forced to stop speaking. Three pairs of arms were flung simultaneously around her neck, and a hearty, boyish kiss imprinted on each cheek, with little Bobby's on her lips. So Mother Baxter couldn't help being happy, and the three little Baxters were equally as happy, and a minute later puss was undoubtedly the happiest of them all as she daintily lapped up a saucer of milk. And that was how this particular cat gained a home—as good a home as ever fell to the lot of a puss.

For nearly three weeks puss remained without a name. As each member of the Baxter family suggested a proper title, the rest at once decided that it would never do in the world. As the days passed it appeared as though puss would have to remain as Puss, and nothing more. But finally a name was decided upon—a queer name, suggested in a queerer manner.

One afternoon Mother Baxter decided to look over her stock of silk patches, and cut them into squares preparatory to making a crazy-quilt. She got them out, and began assorting them into little piles upon the floor according to the different colors. Just as she got busily engaged there came a peal at the front door-bell, and she left the room to answer it. It proved to be a lady friend, and for nearly an hour she entertained her caller in the parlor down-stairs. When

she returned to the nursery again she halted in the doorway with a little gasp of incredulous amazement. Every piece of silk had disappeared from the floor—not

a single solitary scrap was visible anywhere. Her first thought suggested a burglar; then she laughed softly to herself at the utter absurdity of the idea—surely a burglar would not care to burden himself with worthless scraps of silk. She got down on her knees, and poked aimlessly under the couch with a yardstick, but without revealing the missing pieces. It actually seemed uncanny to her to have the patches disappear in such a mysterious manner. No one could have carried them off as a joke, as the three children were at school, and she was the only person in the house. She stood in the center of the room, and gazed helplessly around her. It was at this moment that she became aware of a pair of eyes fixed intently upon her, and those big bright eyes belonged to the new cat. Puss lay curled up in her basket, and with raised head was carefully watching every movement that her mistress made. A sudden thought struck Mother Baxter, presenting itself like an inspiration. She crossed the room, and unceremoniously dumped puss out of her basket bed, evoking a protesting "meow" from her feline ladyship. One look, and the mystery was solved. At the bottom of the basket, carefully dis-



CURLED UP IN HER BASKET

tributed on top of the old quilt used as bedding, were the missing patches. When Mother Baxter had left the room an hour before, puss had promptly appropriated the pieces of silk for her own comfort, carrying them in her mouth, piece by piece, to her bed; and with all the cunning of a wise cat, she had lain upon them to hide them.

Upon the return of the boys from school, Mother Baxter told them about what had happened.

"Wasn't it cute of her?" cried little Bobby, in enthusiastic indorsement of puss' wisdom. "Let's call her Patches!" And as Patches she has been known from that day to this.

While Patches was just an ordinary cat, with the commonest kind of a pedigree, yet she displayed manners that would have done credit to a Cheshire. If she wished to go out, and the door was closed, she would politely ask you to open it, and would never think of departing without first thanking you for the favor shown her. Her vocabulary was quite an extensive one, ranging from a soft, purring whine to the raucous, rasping tremolo to which one sometimes unwillingly listens at the dead of night.

In all the history of catdom there was never a puss of more exemplary habits. But occasionally even her ladyship fell from grace. There were nights when she scorned the warm seclusion of her basket, and roamed the wide, wide world in darkness and in secrecy. Her adventures upon the occasion of these unladylike nocturnal escapades will never be known. Perhaps she may have attended a convention of sister tabbies. Perhaps she went a-courting, lured by the flattering attentions of some handsomely be-whiskered Thomas. Perhaps—

"She'd climb the moonlit fence,  
And loaf around and yowl,  
And spit, and claw another cat  
Alongside of the jowl;  
And then they both would shake their tails,  
And jump around and howl."

Patches possessed a most amiable temper, and would tolerate any degree of rough handling so long as no one pulled her tail. If this was done, either by accident or intent, she would promptly open her mouth to its fullest extent, and

emit a low, deep-throated growl of remonstrance, looking as fierce as a Bengal tigress. If this hint was disregarded, a sudden jab of a furry paw would follow, and the persistent one would nurse some scratches.

Among the so-called pets of the square was a bulldog owned by a neighboring family. He was a savage, ugly-looking brute, with a breadth of jaw that was simply appalling. When those merciless steel-trap jaws closed upon any living thing, nothing short of a red-hot iron could pry them open.

It happened one morning that Patches was crossing the street, when the bulldog caught sight of her. There was a sudden streak of white as he laid himself out for the chase. For some reason or other Patches refused to run, and bravely stood her ground. She awaited his coming with bristling fur, spitting and snarling her defiance. As he neared his quarry, the bulldog leaped, expecting, as he had often done with other victims, to sink his fangs into the soft, yielding neck. But Patches' small, furry head held the primeval cunning of her jungle ancestry. As her enemy was poised in midair she left the ground with the quick, sinuous spring of a young panther, and clearing the bulldog's head, landed fair and square upon his back with every needle-pointed claw unsheathed. The bulldog halted, trembling and terrified. With a mighty effort he strove to shake off the weight upon his back, but the sharp and cutting claws only sank the deeper. Finally there came a whimper of fear and pain, and his tail sank between his legs. As Patches slid from his back, he bolted for safety, and in the days that followed she was never molested by that particular bulldog.

Upon getting up one morning the Baxters made a startling discovery in the nursery, and the boys became fairly wild with delight. In Patches' basket, lying close to their mother, was a wonderful family of kittens; and little Bobby solemnly declared that every one of the Patches were different—almost as variegated as those in a crazy-quilt.

#### Japan's Preparation for War

Probably the world has never seen preparations for a great war carried on so quietly and secretly, and yet so completely, as is the case in Japan's preparation to meet Russia. During the past few months I have often called to mind an incident of some eight years ago. I was standing in the tower of the Nagoya Castle looking out over the wide plain surrounding the barracks. I could see large squads of cavalry manœuvring in one direction; in another plain were infantry going through all sorts of tactics—not simply ordinary drill, but scaling high walls and performing various difficult feats; in the distance another squad were building pontoon bridges, and as I cast my eye over the field alive in all directions with men training, I turned to the Japanese officer standing by my side, and remarked, "If you keep on training as enthusiastically as this you will be able to conquer Russia by and by." The officer looked me up and down for some time, as though he was deliberating whether or not he should make a reply to my comment, and then answered, in even more laconic Japanese than the English language permits, "That is what we intend to do."—John L. Dearing, in *The World To-day*.



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## The Prince and the Dragon

BY AMELIA A. FRY

IT WAS one of those glorious mornings in early May when the whole world is tuned to the song of spring. The grass had freshened to a vivid green in the meadows, while the bursting bloom of the fruit-trees dappled the landscape in pink and white. As Jack Harding rode his filly in an easy canter down the Ralston Road, the early morning air, cool and fresh from the open sea, quickened his blood like a draught of old wine. As he came in view of a cross-road, in the near distance he discerned a girl mounted on a black horse riding in his direction. A single glance told him that she was a poor rider upon a spirited steed. She sat rather awkwardly in the saddle, and held her reins in an inexperienced manner. A short distance ahead of her in a field, close to the road-fence, was a traction-engine at work running a log-saw. As the black horse neared it he pricked up his ears and backed toward the opposite fence. At this moment the girl upon his back did the very worst thing that she could have thought of. She brought her riding-crop down sharply across his withers. The black horse reared; nearly unseating his rider, and then like a flash dashed madly down the road.

"Hello!" ejaculated Harding to himself, "there's trouble there. You've got to do it, old girl," he called, softly, to the little mare. "Go it, Bess!"

Bess responded nobly. She was a descendant of a long line of racers, and knew her business. On and on they sped, and the little mare gradually gained. It was a good road, straight and hard, and perhaps the filly got it into her brown head that she was on a race-track and was expected to come out ahead. Finally the runaway was but a few lengths ahead. Harding called to the frightened girl to reassure her.

"I'll have him stopped in a minute!" he encouraged her. "Don't look back! Hold tight!"

At last he was able to reach out for the runaway's rein, and managed to grasp it near the bit. Then with his other hand he slowly pulled in the little mare. Finally the tension told, and a little further on he had the runaway under control. As he assisted the trembling girl to the ground she gave a little sob of relief.

"It was awful!" she gasped, on the verge of tears. "I'll never, never ride him again. It seems like a miracle that I wasn't thrown off and killed. How can I ever thank you?" she finished, with the deepest feeling of gratitude.

"By not trying," replied Harding, with a smile. "Besides, I'd much rather have you thank Bess. She is really deserving of it for the way she acquitted herself."

Before starting back to town Harding changed the saddles of the two horses, so that he could ride the runaway. As they jogged slowly homeward the girl introduced herself as Mabel Van Fleet. In company with an aunt and two elder sisters she was spending the summer at the seaside resort.

That night, for some unaccountable reason, Harding sat for a long time on the hotel veranda staring dreamily out over the moonlit surf. For the first time in many years he was thinking of a woman. Finally he got up and walked away with a little gesture of impatience. She could not have been more than twenty, and he—was thirty-five, and a self-confessed bachelor.

It was a few days later that Harding again met Mabel Van Fleet seated upon the beach in the shade of a big umbrella. She looked bewitchingly pretty in a mid-summer creation of some light blue material trimmed with lace. They had no sooner started conversing when suddenly Miss Mabel espied an approaching trio of ladies.

"Why, here comes my sisters and Aunt Drusella!" she exclaimed, delightedly. "You just have to meet them, Mr. Harding. I'll introduce you if you don't mind. One's Maud and the other's Marie. You'll like Aunt Drusella, I know. She's awfully nice. We call her 'the dragon.'"

"The dragon!" echoed Harding, unable to suppress his astonishment. "But surely—"

"Oh, we don't mean it in that conception," she laughed. "You've often read in the fairy-books of the dragon—a good dragon, I mean—guarding the princess, haven't you? Well, we're three princesses, and as Aunt's our chaperone and takes such good care of us, we dub her, 'the dragon.' She doesn't mind a bit, you know. We wouldn't hurt her feelings for the world. She's just a dear."

"But some day the prince may come," smiled Harding, "and then what will the dragon do?"

"Maybe she'll like the prince same as the princess," said Mabel, archly.

"Maybe," said Harding, doubtfully.

By this time the ladies had come up with them, and Harding was presented. A few moments before he had put Aunt

Drusella down in his mind as a stern-visaged, elderly lady of Puritan primness. He was agreeably surprised to find her only a year or two the senior of Maud Van Fleet, the eldest sister, and both comely and charming.

He discerned at once that Maud Van Fleet was inclined to haughtiness. Marie was shy and retiring, and had but very little to say. Mabel, to all appearances, was the life of the group. Everywhere she went she shed the sunshine of a joyous, light-hearted disposition.

During the few weeks that followed Harding never enjoyed himself more thoroughly. He took the Van Fleet sisters upon every imaginable excursion that the seaside afforded—sometimes singly, but mostly together, in company with their Aunt Drusella.

Mabel remained his favorite, but he regarded her only as an elder brother might regard a younger sister. Sometimes he even fancied her sitting on his knee, with her pretty fluffy head resting against his shoulder, listening with childish interest to some wonderful fairy-tale of his own creation. Then again, in saner moments, he thought of her as a woman, with a woman's heart, and perhaps—He laughed the thought away as a reverie of his bachelorhood, but it echoed a pain in his heart.

In Maud he found a more congenial spirit than he had first supposed. As they became better acquainted, her haughtiness was gradually dissipated by a greater freedom between them, arising from a more mutual friendship. She had toured the Continent a number of times, while he had been a veritable globe-trotter all his life. So they found much to discuss, from dreary old London Town to the picturesque gondolier of Adriatic waters singing his Venetian love-song.

Even Marie after a time became less reserved, and in truth he found her the more womanly of the three. To his mind she possessed the strongest trait of womanhood—an inherent love of home. One of the air-castles of his younger days had been a future home happy with the laughter of children. It was only a memory framed in the loneliness of single, blessedness—a bachelor dreaming of heaven.

No doubt it was policy on Harding's part not to wholly neglect Aunt Drusella. Frequently he devoted whole evenings to her, either chatting upon the veranda of the hotel or taking moonlight strolls along the beach. In fact, he had got to be quite chummy. The Van Fleet sisters laughingly hinted among themselves that the prince was surely not following out the method as prescribed in fairy lore. Instead of deceiving the dragon to win a princess, he had adopted a more modern course. To all appearances he was courting the princesses and at the same time "standing in" with the dragon. As to which princess he preferred, that had not yet been disclosed.

One evening, after searching high and low about the hotel for the Van Fleets, Harding finally came upon Maud and Marie, in company with Aunt Drusella, grouped together in a sequestered corner of the veranda.

"Where's Mabel?" he asked, with a sort of brotherly freedom that he had lately adopted.

"Down at the shore," replied Maud. "She'll be back before very long."

"I wish she were here," said Harding, his voice vibrant with a sudden joyous note. "I'd like her to hear my confession of happiness. You'll hardly believe it, I know, but I'm going to renounce my bachelorhood. I'm going to get married."

The significance of his confession was not slow in dawning upon the two elder Van Fleet sisters. So it was Mabel, after all. The little deceiver! And all the time she had pretended to be indifferent, professing loyalty to some "dear Billy" of her weekly letters.

"I'm glad to hear of it, I'm sure," murmured Maud, with well-bred emphasis.

"And I know you'll be happy," added Marie, softly.

Aunt Drusella remained silent. She had evidently heard of it before, in her official capacity as chaperone.

"But you haven't asked the lady's name," remonstrated Harding, fairly bubbling over with the joy of it.

"It was not necessary," declared Maud. "Who else could it be but—"

"Your Aunt Drusella!"

There was a sudden movement near by, and out of the shadow, swift as a whirlwind, came an animated vision, all fluffiness and loveliness, in the form of Mabel Van Fleet.

"You funny old prince!" she gasped, excitedly, placing her hands impulsively on her new-found uncle's shoulders. "To think of you marrying the dragon!"

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## FARM PROGRESS

## How We Now Feed Land Which Then Abundantly Feeds Us

THE modern farmer treats his soil well, and has caught the true spirit of progress. He has a scheme of management. He practises rigid rotation of crops. He knows his fields, what piece is best capable of producing, and how long it will be safe to leave a certain crop on a certain piece of ground. He knows, for instance, that clover is a great renovator, a great restorer of fertility, hence the need for bringing it around at the proper time in the system of rotation. Sometimes he does not know why this is, but the average American farmer is the most intelligent agriculturist in the world to-day. He is studying his business. When he finds his fields lack in plant-food, notwithstanding his rotation of crops, he treats them with chemicals or manure. The plants themselves know what is best for them. The farmer is studying his plants, learning that the physics of the soil play an important part in the success or failure of his work. The farmer is the one who is making it practicable for this country to put into the market more than six hundred million bushels of wheat, and it is this and the two billion and a half bushels of corn and our growing cotton crops that make America the leading country in the world. It rests with the farmer, as a reasoning, thinking being, to profit by what science is doing for him. Just as we feed land which then feeds us, people should study the science of their own bodies. We feed the stomach, and the stomach feeds the blood. If the stomach is not in the proper condition to take from the food such mineral elements as make up good red blood, then we are not managing ourselves as well as we manage our fields. Do not think because you have indigestion, sour risings, dyspepsia, that you should eat soft foods which will lay like a plaster in the stomach. No, you should get the stomach into a healthy working condition by taking plenty of outdoor exercise, and give it a tonic which will strengthen the stomach so that it will properly take up the elements in the food and feed the blood. If rich red blood runs through the channels in our body, the arteries and capillaries, and the circulation is vigorous, we are as nearly germ-proof as possible. We do not catch cold, nor have pneumonia or catarrh, we do not take the grip nor typhoid nor any of the germ diseases, because our blood is strong and vigorous enough to throw off these germs. It is like the clear, pure stream which comes rushing down the mountain-side and brushes away all floating debris—so does the blood overcome and cast off the germs which we gather.

The above facts come from no less an authority than Dr. R. V. Pierce, medical director of the Invalids' Hotel and Surgical Institute, at Buffalo, N. Y. In his early practice he was a close student of the facts as given above. Having a large practice in a farming district, he studied nature's ways and the human system. He hit upon some roots and herbs made into an alternative extract, without the use of alcohol, which put the stomach into a vigorous and healthy condition, and thereby fed the blood, making it rich and red and capable of throwing off disease. That is why his "Golden Medical Discovery" gained such a wide reputation nearly forty years ago, and has stood the test of public approval ever since. Without doubt more million bottles of Dr. Pierce's Golden Medical Discovery have been sold in the United States than any other stomach and blood remedy. It cures catarrh in all forms, by getting at the source of the trouble, which is the blood. Start the blood to circulating properly, and you cure catarrh of the nose or lungs, for catarrh is nothing more than a stagnation of the blood.

If you are in doubt about your ailment, or want good medical advice, why not consult Dr. R. V. Pierce, Buffalo, N. Y., by letter, giving all your symptoms, and he will tell you just what to do, and will not charge you for the advice, which is free.

There are some people who can lose fat



to advantage, but the loss of flesh is one of the accepted evidences of failing health. As flesh-making processes begin in the stomach, so naturally when there is loss of flesh we look first to the stomach for the cause. And the cause is generally found to be disease of the stomach and digestive and nutritive tracts, resulting in loss of nutrition and consequent physical weakness.

Dr. Pierce's Golden Medical Discovery restores the lost flesh by curing diseases of the stomach and other organs of digestion and nutrition, and enabling the perfect digestion and assimilation of food from which flesh and strength are made.

"For seven years I suffered with a complication of diseases, including heart trouble, dyspepsia, catarrh of the stomach and female weakness," writes Mrs. Harrette Martin, of Pedlo, Boone County, Ark. "During that time I was never without pain. Had smothering spells, and a great misery in lower bowels, and a very severe cough. Finally the doctors said I had consumption in the last stages, and that I was bound to die. My husband then bought me a bottle of Dr. Pierce's Golden Medical Discovery. I could tell my cough was better after the first dose. I continued his medicine until I had taken six bottles of his 'Golden Medical Discovery' and 'Favorite Prescription.' Now I do my own work for a family of four."

## NATURE'S BOOK

Those desiring to know something about the body in health and disease, also medicine and surgery, without technicalities, should read the "Common Sense Medical Adviser," by R. V. Pierce, M.D., which can be had by addressing Dr. R. V. Pierce, Buffalo, N. Y., for 31 cents in stamps for the cloth-bound, or 21 stamps for the paper-covered book.

## Free Trips to the World's Fair

We are going to send several of the readers of FARM AND FIRESIDE to the great St. Louis World's Fair, and pay every necessary cent that it costs from the time they leave home until they return again. This is certainly one of the best and most liberal ideas set forth by any farm and family publication. These persons will be allowed to stay at the World's Fair at the expense of FARM AND FIRESIDE for ten whole days, which will give ample time to see everything to be seen. On page 14 of this paper we give the plan in full. Please read it carefully. We believe that it will not take many subscriptions to win a free trip, and if you don't want to take the trip you may have the equivalent in cash. You will be surprised to see how easily these trips will be won.

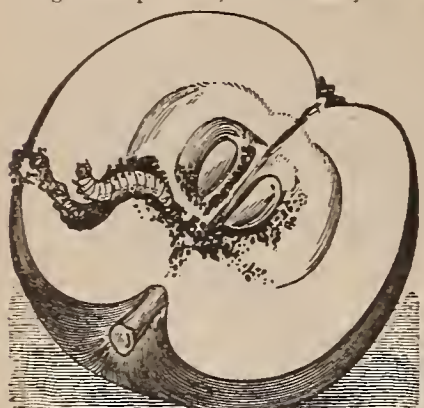
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## The Young People

### Mabel's Visit

A TALE FOR YOUNGEST READERS

SUPPER was over, and the lamp had been lit in the library. In one corner of the room sat Mabel, putting her dolls to bed. Near by, in the big rocker, was her mama. Mabel had never yet neglected to put her dolls to bed the first thing in the evening, and she considered this a very important duty. One of them was quite a baby doll, which she tucked warm and snug in a tiny cradle. The other two were much larger, and occupied a little iron bedstead,



ROSES AND FERNS FOR MAMA

which was all painted white and ornamented with shiny brass knobs.

Suddenly the door opened, and Mabel's papa entered the room. He looked carefully all around him, and finally espied a golden, curly head bobbing up and down in the further corner.

"Hello, honey!" he called out to his little girl.

"Hello, papa!" answered Mabel. "But please don't talk so loud," she pleaded softly, "cause you'll wake my dolls."

"All right," whispered her papa. "I'll be careful." Then he turned to Mabel's mama. "I've decided to take my vacation next week," he said, "and I don't know but that I'll spend it on Brother John's farm. He's been asking me to come out to see him ever since he bought the place. Do you know, Martha," he went on, laughingly, "he's promised to make a new man out of me. I'm to be placed on a strict diet of the best of pure air and water, and cream so thick that you cut it out in blocks. He said I was cooped up in an office too much, and what I needed was to get out in the sunshine of God's country, and kick the clover-tops off the grass, so I guess I'll have to go."

"I couldn't think of a nicer place," said his wife.

Mabel's father again looked in the direction of the golden, curly head. "Come here a moment, honey," he called to her. "I've something to tell you. How would my little girl like to take a trip to the country?" he asked, as he lifted her to his knee.

"Where?" asked Mabel.  
"Oh, a good many miles from here," he told her. "We'll have to travel in the cars almost a day, and when you get there you'll meet your Cousin Bobby. You've never seen Bobby, but I know you'll like him immensely. He's a little older than you are, and you'd have the jolliest kind of a time letting him show you around. Now, wouldn't you like to go?"

"I'd just love to!" declared Mabel, smiling all over her face. Just then she happened to look at her mama, and the smile faded quickly away. "Would—would—" she began, dubiously, with a troubled look in her big blue eyes.

"Would what?" asked her papa.  
"Would mama go along?" she asked, anxiously.

"Of course," laughed her papa. "We couldn't go without her. Why, it would be just like a ship setting sail without a captain. Don't you think it would?"

"I guess so," confessed Mabel, hesitatingly, "only I never saw a ship."

So, early one morning a few days later they started away. Mabel had a wonderful time watching things from the car-window. She wondered what the people wanted with so many horses and cows as she saw grazing in the fields. She felt sure she would be satisfied with one, and it would have to be a little one at that.

Finally they arrived at their destination, and found the hired man waiting for them with a team. Mabel had no sooner been lifted down from the platform of the car when a laughing, brown-faced boy came rushing up to her. "You're Mabel, aren't you?" he greeted her, breathlessly. "I'm your Cousin Bobby! I'm awfully glad you've come!"

"So'm I," said Mabel, politely. She decided at once that Bobby would make a pretty nice sort of chum.

"We'll have bully times together," he assured her. "Come on, let's get in the front seat with Tom. Maybe he'll let you drive."

And Mabel did drive—nearly the whole way home. It seemed a mighty big thing for a little girl to hold the lines all by herself. Nor was she a bit afraid that the horses might run away—surely nothing could happen while Tom was sitting there by her side.

The next day Bobby showed Mabel around the farm. He took her out to the big red barn, and they had the time of their little lives tumbling about in the hay-loft. He showed her his Shetland pony, and she rode him around the pasture lot a number of times, sitting straddle like a boy. But when she saw a brood of chicks for the first time she nearly went wild with delight, and wondered whether she could take the fluffy little things home with her and make pets out of them. Bobby told her he was afraid that they would not live without their mother, and to have a fussy old hen around the house all the time would become awfully tiresome, so Mabel rather reluctantly gave up the idea. That afternoon Bobby proposed a game of hide-and-seek in the corn-field. Mabel had never been in a corn-field before, and when Bobby told her to shut her eyes so that he could hide, she began to feel just a little bit scared. When she opened her eyes a minute later Bobby had disappeared, and there she was, all alone, with nothing in sight but corn-stalks. She wandered around a while, and finally espied Bobby lying behind the big leaves of a pumpkin-vine. Mabel called to him, and told him that she didn't think there was much fun in the game, as everything was so still and quiet, and it made her feel as though there were bears around. Bobby laughed, and said that the only time there was any animals in the corn was when the cows broke down the fence. On their way back to the house Mabel stopped at the end of the garden, and gathered some roses and ferns for her mama. She carried them in her dress, so that the thorns on the rose-stems could not hurt her fingers.

It was a very tired little girl that went to bed that evening, and she was just as happy as she was tired. The next morning the sun had been shining in her room quite a long time before she awoke. She jumped quickly out of bed for fear Bobby might think she was lazy, getting up so late; but Bobby didn't think anything of the kind—he was very glad that Mabel made such a jolly good cousin.

AMELIA A. FRY.

### A Little Nonsense NOT SOLID

Marie, who is particularly fond of sitting on mama's lap, was asked why she does not like papa's lap, and she said, "Cause papa's lap is broke."

### HEART OVERFLOWING

"I'll jest tell you, Massa Simpson," said colored Ephraim, "why I doesn't work bettah. Mah heart am so 'toxicated with love ob mah gal Lizie Ann, I doesn't have time ter palpitate." C. E.

### The Key to Success

A careful study of a business is oftentimes the key to success. To be successful, the farmer should avail himself of every opportunity to read and study up on the practical points of farming, and then put them into practice. Where is the best place to find these practical helps? Right in the columns of FARM AND FIRESIDE. It's all practical, every word of it. Twenty-five cents a year.

### In Franklin's Day

Experiments with electric contrivances were becoming active more than a hundred years ago, and in 1782 a French admirer of Benjamin Franklin predicted the advent of a day when lightning would be "loaded in cannons and harnessed to chariots." But eighty years after, at a time when Europe was already covered with a network of railways, the appliances of electricity to locomotion had not yet gone beyond the construction of a few amusing toys.

In 1867, however, the invention of a powerful electric dynamo made the scientific world suspect that the steam-engine had found a rival. One of the inventors was a relative of Sir William Siemens, an owner of half a hundred valuable patents, and a man of whom it used to be said that "for every new mechanical problem he could suggest from ten to twenty effective solutions."

Dr. Werner Siemens, a brother of William, had the honor of anticipating the construction of an electric motor by a few years, for there seems no doubt that in the winter of 1867 he invited two friends to see his lightning chariot trundle around by fits and starts.

But he admits that this first attempt only served the purpose of illustrating the defects of the machine. The armature became heated too quickly, and the difficulty of keeping up a steady current made the motions of the apparatus resemble those of a cart with a balking horse.

In 1847 the Doctor went into partnership with a practical machinist named Halske. In 1879 the firm of Siemens & Halske obtained a license to operate a line of electric cars between the Berlin College of Cadets and the suburb of Lichterfelde. This time the practical importance of the invention could not be doubted. The cars were still likely to jolt, but they stuck to their track, and moved along at the speed of a swiftly trotting horse.—Youth's Companion.

### King Cyrus an Example for Boys

Xenophon, a Greek historian and interpreter of Socrates, wrote a kind of mythical romance about Cyrus the Elder, called now the "Cyropædia." In it he describes a visit of Cyrus to his grandfather Astyages, king of the Medes. One day young Cyrus chose to act as cup-bearer for the king.

Astyages praised him for his dexterity and grace, but said, "You have forgotten one essential ceremony, which is that of tasting." For the cup-bearer used to pour some of the liquor into his left hand and taste it before offering it to the king.

"No," replied Cyrus, "it is not through forgetfulness that I omitted that ceremony."

"Why, then," said Astyages, "for what reason did you do it?"

"Because I apprehended there was poison in the liquor."

"Poison, child! How could you think so?"

"Yes, poison, grandfather, for not long ago, at an entertainment you gave to the lords of your court, after the guests had drunk a little of that liquor I perceived all their heads were turned—they sang, made a noise, and talked they did not know what. You yourself seemed to have forgotten that you were king, and that they were subjects, and when you would have danced you could not stand upon your legs."

"Why," said Astyages, "have you never seen the same thing happen to your father?"

"No, never," said Cyrus.

All our boys who are students of history and of the Bible know that it was this temperance lad who, having grown to manhood, and having conquered Babylon, permitted the Jews to return from captivity in 536 B.C. The Lord used him as verily as any other man that ever lived. Had he early become addicted to the cup, his name would not be associated intimately with God's plan. What a blessing it would be if all American boys were as wise as he!—Religious Telescope.

### A True Cat Tale

A cat that had several times been deprived of her kittens hid a litter of them in my aunt's barn. Cries could be heard from some quarter, but the kittens could not be found.

Between their mother and the family cat was a feud of long standing; and for this reason my uncle and the maid used to drive the mother away. My aunt never did so.

Pussy learned at length to make for the door when she heard footsteps, and also to look behind her. If she saw my aunt's face she turned back.

One day auntie said to her, "Old cat, where do you keep your kittens? I haven't seen them yet." Immediately she went to the woodpile and called, and out came all the babies for inspection.—Juliet A. Cook, in Men of To-Morrow.



## The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

### Lapsed Legacy

H. G. S., Michigan, inquires: "A. is a bachelor, and has some property. He makes a will in favor of B. B. dies before A. Will the property go to B's wife? The property is in Minnesota."

The legacy would lapse. B's wife would not get it. If B. had children, it would go to them according to the statutes of most states.

### Inheritance

D. W. J., Illinois, asks: "A. married a woman, and they bought a tract of land. A. had nothing but a team. The wife inherited land from her father, sold it, and put the money in the tract of land her husband bought. The deed was made to him. She died without children. Within three months he died, also. Does this tract of land go to his or her people?"

I should think the land would go to the husband's people.

### Taxes—Limitation of Mortgage Debt

R. S. inquires: "If Mr. A. gives his wife a deed for his farm, and retains a life lease, in whose name will the taxes be?—Do notes secured by mortgage on real estate ever outlaw if not paid, and the taxes are kept paid by the owner of the mortgaged land?"

In Mr. A.'s name.—Yes, in fifteen years from the time they are due, or from the time the last payment was made.

### Rights of Children—Fence—Judgment

S. C. P., Wisconsin, inquires: "Has a son or daughter who is married the same rights and privileges in their parents' home as children who are at home unmarried and help their parents?—A. owns an eighty-foot-front lot facing on First Avenue. B. and C. each own a forty-foot-front lot facing on Second Avenue, directly in the rear and abutting A.'s lot. There is a board fence on the division line, which was built and the boards nailed on B.'s and C.'s side of the fence twenty years ago. Neither of the present owners built or paid for said fence. Who is now to build or pay for a new fence to replace the present one?—A., of Wisconsin, sued on a note and secured judgment against B., of Minnesota, who has no property, or who, prior to the above action, assigned all property to his wife. Does any part of her property revert to her husband after her death, whether she wills it to him or not? If so, could A. then get an attachment or levy to satisfy the judgment?"

Neither married nor single children have any absolute rights at the home of the parents, except that parents must

support their minor child and educate him. Their rights are about the same. If either a single or married child works for his parents, he cannot receive any pay unless the parents agree to pay him.—There is no partition-fence law as to city-lot owners. Whoever wants the fence will be required to build it.—If the wife dies, leaving children, the husband would have a life estate in her real estate only. If she leaves no children, the husband gets all, and if the same is not exempt under the homestead laws the judgment could be collected.

### Deed of Real Estate by Husband to Wife

B. J., Michigan, says: "If a husband gives his wife a deed to a piece of land, can she hold it herself, or does it have to be given to a third person to keep? If so, for how long a time?—A man gets married, and his wife leaves him. He does not see nor hear from her for fourteen years. During that time the wife marries again, then leaves that husband, gets a divorce, and marries another. Then her first husband gets married. Would the second wife be legally married? Would the first wife be entitled to any of the property that the first husband got since she left him, or would it go to the second woman that he married?"

In a number of states if the husband wishes to convey real estate to the wife he must do it by means of a third person. In Ohio this rule has been recently changed. I do not know what the rule in Michigan is, but think it must be done through a third person.—The mere fact that the wife deserted the husband for fourteen years, married again, and was divorced from the second husband, would not annul the first marriage; therefore, generally speaking, the rights of each to the property of the other remain. There are only two ways in which a marriage can be dissolved, and these are death and divorce. The above case seems to be a hard one, and it is possible that the court might find a way to protect the second wife.

### Inheritance

J. M. K., Illinois, asks: "A. and B. marry in Wisconsin, and raise a family. One daughter marries, and dies without any children. Will her husband be an heir to any part of his father-in-law's estate?—In Wisconsin Mr. and Mrs. J. take a boy to raise, but not adopt. They had him baptized, but he keeps his own name. Would he be an heir to any of their property? They have several children of their own."

No.—No.

## The Family Physician

By ROBERT B. HOUSE, M.D.

### Samurai and Jiu-Jitsu

More than twenty-five hundred years ago there sprang into existence in Japan an order of knights who were known as the samurai. To them was imparted all the learning, the polite breeding and the forms of superiority that mark the gentleman. They were skilled in arms and versed in the arts of war, for they were the emperor's fighting men, and none but they were allowed to bear arms. As there could not always be war on hand, and as it was considered beneath the dignity of the samurai to go into any ordinary callings, it came about naturally that these little knights found much idle time on their hands. Being men of war, they turned their attention to athletic feats. One among the samurai conceived the idea of learning by practice the location of every sensitive nerve and muscle in the body. After that he discovered all the joints of the bones that could be seized in such a way as to give momentary power over the muscle of an adversary. He practised with his fellow-samurai, and thus by degrees was developed the most wonderful system of athletics in the world. The Japanese call this work "jiu-jitsu." The deft pressures applied in the practice of jiu-jitsu produce only momentary pain, and do not really injure the muscles or nerves. In all other things the Japanese are the most polite people in the world, so it follows that even in their fighting they have developed a humane yet effective method of self-defense. They do not strike out

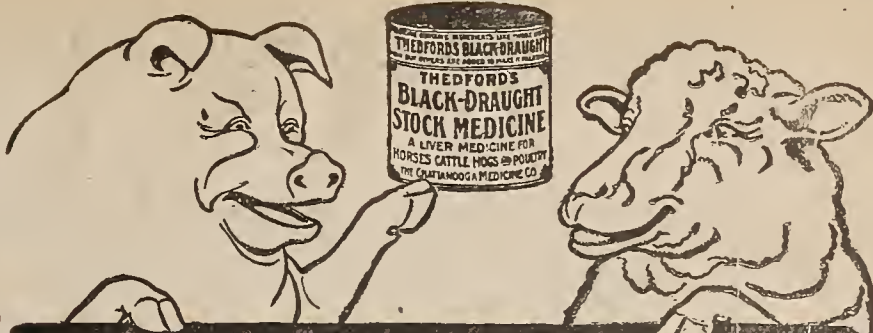
with the clenched fist, and seek to bruise, as do the Anglo-Saxons in their boxing contests. A knowledge of jiu-jitsu enables one almost instantly to convince his opponent that it is useless to fight.

There are now schools of jiu-jitsu everywhere in Japan. Every soldier, sailor and policeman is obliged to perfect himself in the system. A Japanese policeman possessed of the art has been known single-handed to reduce to submission and to take to the police station four sturdy sailors of a foreign Asiatic squadron.—St. Nicholas.

### Cherry-Pits Without Appendicitis

Nearly one hundred cherry-pits were found in the appendix of a patient who was being operated on in a Brooklyn (N. Y.) hospital recently. The collection of stones had not caused appendicitis, however. Their discovery was due to an operation for cancer of the stomach. Not only the appendix, but a large space in the intestines was also filled with the pits.—New England Medical Gazette. Now, what shall we do with that fact? A hundred cherry-stones found in his appendix, and still no appendicitis! "Mirabile dictu!" Truly this caps the climax. And now we may eat grapes again, may we; and small pearl-backed collar-buttons?—The American Physician.

It is very necessary that the farmer should read the excellent help and advice in the columns of FARM AND FIRESIDE. It will repay him a hundredfold.



TAMPA, FLA., Feb. 4, 1902.  
Last summer I had some sick hogs and I did not know how to cure them. Black-Draught Stock and Poultry Medicine was recommended to me and I find it perfectly good. I have recommended it to several of my friends who own stock.  
ALFRED LOVE.

Hogs are the most difficult animals in the world to treat and it is a fair test for any stock medicine when it restores sick hogs to health. On account of their ravenous and gluttonous appetites, hogs frequently suffer with indigestion and constipation and the dreaded cholera finds them easy victims. Black-Draught Stock Medicine is a liver medicine that never fails to relieve cases of constipation and indigestion in hogs. It has been known to cure cases of cholera in the first stages. But why wait until your hogs are sick? It is much easier to keep them well. When hogs are sick they stop eating and medicine must be forced down their throats. When well, an occasional dose of

## BLACK-DRAUGHT STOCK AND POULTRY MEDICINE

in their food keeps the digestion healthy, the bowels regular and the liver active. Black-Draught Stock Medicine in hogs' food once or twice a week will keep them perfectly healthy and healthy hogs gain in weight—a great item to their raiser. A 25-cent can of Black-Draught Stock and Poultry Medicine never fails to pay for its cost many times over. Druggists keep 25-cent air-tight tin cans of Black-Draught Stock and Poultry Medicine or it can be purchased from the manufacturers, The Chattanooga Medicine Co., Chattanooga, Tenn.

KELSO, I. T., May 25, 1902.  
I am proud to say that Black-Draught Stock and Poultry Medicine is a good remedy for all stock. Black-Draught Stock and Poultry Medicine is keeping my hogs healthy all the time. I have never lost a hog since I began putting Black-Draught Stock Medicine in their food.  
JOE TICHENOR.

## FREE CHAIN OF 4000 BEADS A Rope Five Feet Long

In this beautiful rope necklace there are almost 4000 perfectly formed Venetian Beads. It is sixty inches in length, finished with four strand tassels with large intersecting bead. These large beads are very handsome and add greatly to the whole appearance. These neck chains are hand made, the beads are all selected for uniformity of size and color, then strung on strong linen thread; some are all of white beads, others all turquoise blue, and a very pretty one has blue and white beads alternated. Think of the labor and patience required to string four thousand beads. After stringing three long strands they are braided as shown in the illustration and are 60 inches long. This new style of chain or rope necklace is to be worn about the neck as you have always worn any necklace, but there is an added use to this one not possible with the ordinary necklace. Being five feet long, they are to be worn with your outside garments, like a scarf. The effect of these ropes of beads when worn outdoors is very stunning and places you in the height of fashion. We are making every effort to increase our subscription list this year and are now giving our readers the very best stories and other fascinating features in our magazines at a price per year that equal others costing as much per copy. We want your co-operation to keep this moving and are glad to repay you handsomely for all soliciting you will do for us. Specimen copies and everything to do with are free. Read how to get this rope of beads free.

**Trial Offer.** If you will send us only twenty-five cents for a trial six months' subscription to COMFORT, we will send you one of these rope necklaces, of white, blue, or white and blue beads mixed, paying charges for postage and packing.  
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These lands are in the Park Region of Central Minnesota—10,000 acres to select from—raising wheat, corn, oats, rye, and the finest vegetables you ever saw. Clover grows without reseeded; a perfect dairy and sheep country, with the markets of Minneapolis and Duluth near at hand. Don't pay rent any longer. You can own a farm. This land now sells for \$6 an acre.

You can begin with 40 acres; but if you can pay more you should take 80 or 160 acres; 80 acres would cost you \$50 cash and \$5.60 a month. Why not begin to-day, if you want a farm. Out out the Coupon, write your name and address, and I will send you the booklet that will tell you how.

If you want to buy, tell me how much you have to invest and I will submit a list of improved farms or lands to select from.

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Send me your booklet telling how I can buy a farm in the timber country of Minnesota, worth \$5.00 an acre, by paying \$1.00 an acre cash and 7 cents an acre monthly, as advertised in The FARM AND FIRESIDE.

NAME.....  
ADDRESS.....  
(Cut this Coupon out and mail today.)



# THE HILLS OF COLORADO, DEAR TO ME

## A SWEET BALLAD

By GEO. E. JACKSON  
Arr. by Curtis A. Duval

*Moderato con espressive.*

*f sempre legato* *dim.*

1 Far a - way a - mong the moun - tains in a val - ley calm and cool, There  
2. A - gain I hear the rip - ple of the clear and spark - ling stream, 'Long

lies a pret - ty vil - lage where I first at - tend - ed school; As I gaze up - on the  
which I used to wan - der in a hap - py, youth - ful dream, To me those days were

pic - ture as 'tis drawn by mem'ries hand, I see my dear old playmates, a  
full of bliss I had no tho't of care: I knew and lov'd a fath - er and

*piu mosso.*

hap - py joy - ous band..... In the door - way stands the mas - ter, with a word and smile for  
sweet - fac'd moth - er there..... Side by side they now lie sleeping, 'neath the shadow of the

*piu mosso*

all; Who taught us all our A. B. C's from a chart up - on the  
pine, And hal - low'd is the mem - o - ry of that dear old home of



wall..... Our leis - ure hours were spent in play and oft' - times we would  
 mine ..... Some day I will re - turn to where my heart will ev - er

*tempo primo.*

climb Those grand and rug - ged hill - sides gath'ring rose and col - um - bine.....  
 be; Life's jour - ney shall be end - ed mid those hills so dear to me.....

*rit f dim*

### CHORUS.

*Tempo di Valse.*

Could I but climb those hills a - gain as in the days of yore..... And

*mp*

see their snowy crest - ed peaks high a - bove the cab - in door..... And

hear the low - ing of the herds in the val - ley far be - low..... The

*cresc. rit*

hills of Col - o - ra - do, dear to me.....

*rit. Lento. p pp*



# Features of Timely Interest—St. Louis World's Fair

IT is the wish of FARM AND FIRESIDE that every reader of this journal will have the pleasure of visiting the great St. Louis World's Fair. It opens April 30th, and closes December 1st.

We believe that the members of the big FARM AND FIRESIDE family will be interested and pleased with the illustrations and articles pertaining to the great St. Louis World's Fair which will appear in the columns of FARM AND FIRESIDE from time to time. These photographs and descriptions will be devoted to the most wonderful and extraordinary features of this exposition, which will be beyond a doubt the greatest, grandest and most wonderful display of wealth, art, science and industry the world has ever beheld. This exposition will cover nearly twice as much ground, expend nearly twice as much money, and far surpass in many respects, either the great Chicago World's Fair or the recent Buffalo Exposition.

What will the Louisiana Purchase Exposition, or the St. Louis World's Fair, celebrate? It is one hundred years since Thomas Jefferson (then President of the United States) purchased from France what was known as the Louisiana Territory, comprising three million square miles, for the sum of fifteen million dollars. This three million square miles is equivalent to one billion nine hundred and twenty million (1,920,000,000) acres, which figured out means that it cost the United States eight tenths of a cent an acre, or about thirty-two acres for twenty-five cents. Do you think it is worth it?

Spain originally owned this tract of land, and fearing that she could not hold it, sold it to France; and France, believing that it might cause her trouble to hold and protect it, and needing the money badly, sold it to the United States in 1803.

This territory included what is now practically the states of Louisiana, Arkansas, Missouri, Oklahoma, Indian Territory, Kansas, Nebraska, Iowa, Wyoming, Montana, North Dakota, South Dakota and Minnesota.

President Jefferson assumed almost the entire responsibility of this vast deal, and caused a great deal of criticism for and against in both houses of Congress. When the treaty, signed in Paris one hundred years ago, by which the area of the United States was to be, more than doubled, stood for the ratification before Congress, there were, contrary to what we might suppose, protracted discussions and objections of many sorts. Some thought that the title to the new acquisition was not a sufficient one; others were anxious on account of the very magnitude of the new territories, and expressed the fear that the federal tie would be loosened if extended to such remote and partly unknown regions. Many were the criticisms and long the speeches, but the keen foresight and wisdom of President Jefferson in this transaction is plainly evident to-day to every American citizen.

Senator Jackson, at that time senator from Georgia, rose, and turning toward one of the hostile party, said, "In a century, sir, we shall be well populated, and instead of the description given of it by the honorable gentleman, instead of a 'howling wilderness' where no

this country has ever beheld, including the President of the United States and a former President of the United States, representatives of all the powers of the globe, soldiers and sailors, priests, magistrates, savants, artists, tradesmen and agriculturists, workmen and citizens innumerable, all bent upon consecrating by their presence the homage due the work done during the

The Louisiana Purchase Exposition, or St. Louis World's Fair, is to celebrate just one hundred years later the purchase of this vast tract of land.

## Plan of the Exposition

Buildings of surpassing beauty and stateliness and of large capacity are practically completed for the



SECTION OF THE PALACE OF LIBERAL ARTS—COST \$500,000.00

hundred years. Good work, indeed; nay, stupendous."

Sanguine as he was, Senator Jackson would, I think, scarcely believe his eyes if he saw the matchless sight we presently behold, the impending exhibition of all the produce, all the discoveries, all the art of the wide earth. He would scarcely believe his ears if he heard that we could come in twenty-seven hours from

Louisiana Purchase Exposition. This event will be a world's fair in the largest sense, reflecting the broadening spirit of the world, and revealing the progress to be found within the boundaries of all participating nations. The Exposition will be quite unlike its predecessors in America and Europe, in that it will display not merely the products of human ingenuity and skill, but will show first the raw materials, then, step by step, the methods of handling them and the processes by which they are changed from their natural state into things of usefulness and beauty. The vast Exposition, far greater in its extent than any which has preceded it, will thus abound in life and motion throughout its many departments. The exhibit buildings will become, in some respects, great workshops for many industries. In each will be installed, so far as practicable, the latest machines and devices for carrying on the work of manufacture as performed in many countries. From countries where machinery is little used will come the patient handworkers who perform their tasks almost with the skill of magicians. From lands where man has assigned to machinery the most intricate and delicate tasks will come new types and forms of machines to challenge attention and admiration. It is the aim of the World's Fair management, with eleven years of marvelous progress since the achievements recorded at Chicago's Columbian Exposition, to make this ingathering of the nations an event of the highest importance in results and benefits to the people of many tongues and nationalities who shall have part in it.

## A City of Homes

St. Louis is noted also for its many palatial homes and beautiful residence districts. The people are largely home-owners, thanks to the beneficent operation of many savings and loan associations. It has been quite the fashion in the development of St. Louis to set apart exclusive residence sections where all who build conform to strict rules, with the result that very beautiful places have come into existence, some of them lined with palaces. Considerable fortunes are represented in the cost of each of the dwellings which line these park-like streets. The value of parks has not been overlooked in the city's advancement. A considerable number of park reservations have been made from time to time, beautiful and dedicated to the public use. Prominent among these are Forest Park, half of which is included in the grounds of the Louisiana Purchase Exposition; Tower Grove and O'Fallon parks. The Missouri Botanical Garden, the gift of Henry Shaw, and known as Shaw's Garden, is another of the precious heritages of the city from one who so loved the beautiful in Nature that he devoted his great fortune to the cultivation of flowers, plants and trees, gathering them from all parts of the world, and finally giving them in trust to those who should live after him.



DETAIL OF SECTION OF PALACE OF MANUFACTURES—COST \$720,000.00

civilized foot shall ever tread, if we could return at the proper time we should find it the seat of science and civilization." One century has just elapsed since he spoke.

One of the speakers at the dedication ceremonies of the St. Louis World's Fair said, "If President Jefferson could return among us, he would see no 'howling wilderness,' but one of the most brilliant gatherings which

the place where he had delivered his prophecy, and which had become only two years before the seat of government. No less great would be his surprise if he learned that the supposed 'howling wilderness' had been turned into an immense garden, dotted with wealthy towns, the home of millions of well-to-do American citizens.



## Wit and Humor

### Dobbin's Despair

I have no differential clutch  
And no pneumatic tire;  
I guess I don't amount to much,  
For none come to admire  
My form or speed—I have no cam;  
And, to my deep remorse,  
I must confess, I only am  
A one-horse-power horse!

They used to stroke my sorrel side,  
And tell how I could go;  
To-day they speak in tones of pride  
Of some bright red tonneau.  
But though my sorrow is so great,  
And anger is so keen,  
I'm glad to have a chance to state  
I don't eat gasoline.

I don't know how to carburet,  
Nor how to radiate—  
When I wished to get up and get  
I simply struck my gait.  
'Tis true, in casting out the beam  
For fairness I should try—  
But 'lectric, gasoline or steam,  
The "mote" is in my eye!

I have no wondrous steering-gear—  
But still they rush to see  
A thing that has, I'm pained to hear,  
A horseless pedigree.  
They used to pet me all the time,  
But now they only shrug  
Their shoulders, and pass by, for I'm  
A poor old sparkless plug!

—Chicago Tribune.

### A Rare Distinction

"WHAT town is this?" asked the eminent statesman, who was making a political tour of the provinces.

"Ionia," they told him.

The eminent statesman stepped out to the rear platform of the gorgeous private car in which he was traveling.

"My countrymen," he said, impressively, to the cheering throng at the station, "your beautiful and thriving young city has a rare distinction. Independently of its commerce and manufactures; independently of its charming location; independently of its stalwart men and fair women who inhabit it, so many of whom I see before me—not forgetting these bright and winsome young children who are also here, the hope and mainstay of the republic—independently, I say, of all these, your lovely city—" Here he became truly eloquent. His eyes flashed, his voice rang out in clarion tones, and he shook his clenched fist at the zenith. "—has the rare distinction of bearing a name that has only five letters, and yet has four syllables!"

The applause, as the train moved away, was simply deafening. —Chicago Tribune.

### Radium and Miss Flutterly

"Isn't this an age of marvels?" said little Miss Flutterly. "I really don't know what will be discovered next. Do you? Really, it would take a strictly scientific person to tell, because just as you think it's going to be air-ships it turns out to be radium or something else as wonderful."

"It seems as if the manufacture of radium ought to be stopped, because if a single pound of it was— What is it they do with it—turn it on, or explode it, or what? Well, anyway, if a single pound of it did what it does do, what-

ever that is, it would annihilate the world. Just think of the danger of having even a little of it. They say it's diminishing at the rate of a certain number of grains a second, and it's going so fast it would reach the sun inside of a minute; yet, after watching a heap of it for I don't know how many thousands of years, it doesn't look any smaller—so I don't see how we're going to get rid of it now it's here. And they say it will make anything shine except imitation diamonds. I should think that people wouldn't dare wear paste after this, because if they suddenly stopped shining it would be so mortifying."—Charles Battell Loomis, in Leslie's Monthly.

### "Lean as Pharaoh's Kine"

A good story of an old crofter who appeared before the commission to apply for a reduction of rent has just been told at a meeting in Glasgow. The number of cattle on the farm led Sheriff Brand to observe that surely the croft could not be in such a bad way as its owner would seek to show.

"Och," replied the old fellow, "you should see the bit beasties."

"What like are they?" queried the sheriff.

"They're as lean, sir, as Pharaoh's kine."

"How lean was that?" pawkily asked the sheriff, doubtless thinking that he had cornered the applicant.

But had he? Not a bit. Like a flash came back the answer. "So lean, sir, that they could only be seen in a vision."—Yorkshire Post.

### Essay on Man

The Fort Cobb "Record" tells this story of a young girl's composition on "Men," which shows that the seed of the women's club is sown on the territorial prairies:

"Men are what women marry. They drink and smoke and swear and have ever so many pockets, but they won't go to church. Perhaps if they wore bonnets they would. They are more logical than women, and always more zoölogical. Both men and women have sprung from monkeys, but the women certainly sprung further than the men."

### A Limit to the Division

During a recent session of the House of Representatives, Mr. Grosvenor, of Ohio, arose in his place, and intimated that the gentleman who had the floor was transgressing the limit of debate.

"I thought it was understood," said the offending member, "that the gentleman from Ohio divided his time with me."

"True," responded Mr. Grosvenor, grimly, "but I did not divide eternity with you!"—New York Tribune.

### Just Arrived

City Niece—"You must be cold, uncle, after your long ride from the railway station. Come over here to the register."

Uncle Jed—"Gee! Do I have to register? I thought I was to come here on a visit."—Chicago Tribune.



A GREAT MIND-READER

Uncle Sam—"The kind o' preferential tariffs you're a-pinin' for, Johnny, you know, is this: 'Sammy,' you says, 'you don't put up your tariff any higher ag'in me, an', says you, 'I'll sock up my tariff ag'in every blame nation but you. We're all Anglo-Saxons,' you says, an' by gosh, Johnny, you're right."—From the "World" (Toronto).

### Speculation on the Infinite

"Mammy," inquired Piccaninny Jim, "what does ghosts want to come back to dis yearth fo'?"

"Dat's a foolish question. Dey kin go whahebber dey wants wifout payin' no house-rent ner cah-fare, an' nobody can't shet 'em out. Sometimes I reckons dat ghos'es is de only folks dat re'ly enjoys life."—Washington Star.

### Now's Your Chance

FARM AND FIRESIDE would like to pay your expenses to the St. Louis World's Fair and return—every necessary cent. Do you want to go? See page 14.

## A "Little Doctor" on the Farm.

The good housewife, especially those in the country districts, recognizes the importance of small beginnings in all things; most especially is this the case in the earliest stages of sickness. The liver becomes sluggish, constipation ensues, and the stomach being disordered, food instead of nourishing the body, is actually poisoning it. Undigested food generates gases which poison the blood and cause biliousness, sick-headache, and a general out-of-sorts condition. But the prudent housewife knows the necessity of keeping a remedy at hand. She has a box of

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in the cupboard, and on the first sign of any departure from the general health, a dose is given, and good health is restored, and further suffering is averted. In hundreds of thousands of homes BEECHAM'S PILLS are the only family medicine. They keep the family in good health and no other medical aid is required. If you would keep well let BEECHAM'S PILLS be your Family Medicine.

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more hands to develop the country. Briefly the condition is this: The Southwest is really in need of nothing save people. More men are wanted. In the Southwest are vast areas of unimproved land—land not yielding the crops of which it is capable. The same thing, in a different way, is true of the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and manufacturing plants, for small stores of all kinds, for hanks, newspapers and lumber yards. Mechanics and professional men, both are in demand. Tell us what you want, how much you have to invest, and we'll help you with information about a good opening.

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at the expiration of ten years you practically will be in the same condition you are to-day. Buy a farm to-day in

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Clean out the feet of the horses after the day's work is done, and you'll not have so much trouble with their feet.

FARM AND FIRESIDE is published for all. It is devoid of flattery, frank in its statements, practical in its advice, rich in variety, fair in its arguments.

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FARM AND FIRESIDE is not all we hope and plan to make it, but see what it gives at this time—good, sound, practical farm talks from reliable authorities whose opinions are respected throughout the United States, the departments of interesting fiction, household matters for the good housewife, for the boys and girls.

Plows, drills, harrows, etc., should not be left out in the weather when not in use. It is the most destructive thing to farm-machinery. Have system.

Do not elect to office men who cannot take care of themselves by the ordinary pursuits of life.

Now is the time of year to fix up the fences and gates. The frost may have twisted the posts out of shape. Ricketty fences and gates look bad, and are really much worse than they look. Keep everything about the farm spick and span, and don't forget to renew your subscription to FARM AND FIRESIDE. Look at the address label.

He is a dull farmer who is not learning lessons from what he is doing that will help him to do it better next time.

We must ask our friends and neighbors to help add thousands of new subscribers to FARM AND FIRESIDE within the next few months. If each reader will send just one new subscription to FARM AND FIRESIDE we will soon have a million. Help the good work along by sending just one—more if you like—new subscription at twenty-five cents a year.

Don't be surrounded by mud, when you can easily have good paths about your premises.

**We Want One Hundred Thousand** club-raisers for FARM AND FIRESIDE. We will pay each one liberally for the work he does. We are going to get one million subscribers to FARM AND FIRESIDE, and we must have club-raisers to do the work. Any one can be a club-raiser, no matter what he may be doing. It does not require all your time—just your opportunities and spare moments. Wouldn't you like to help FARM AND FIRESIDE along? You can easily do it. Now, don't wait, but write to-day for particulars to FARM AND FIRESIDE, Springfield, Ohio.



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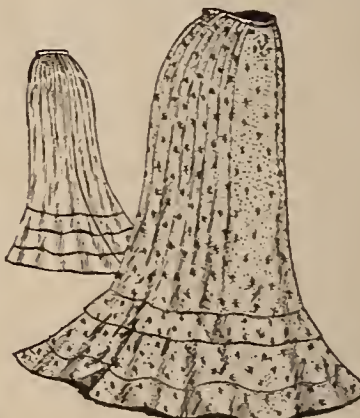
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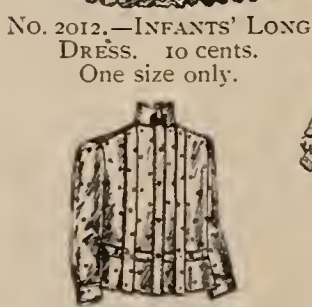
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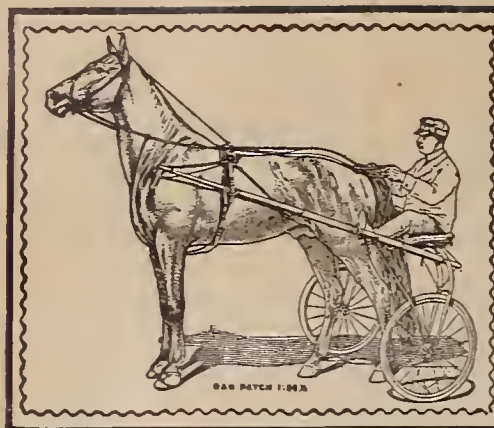
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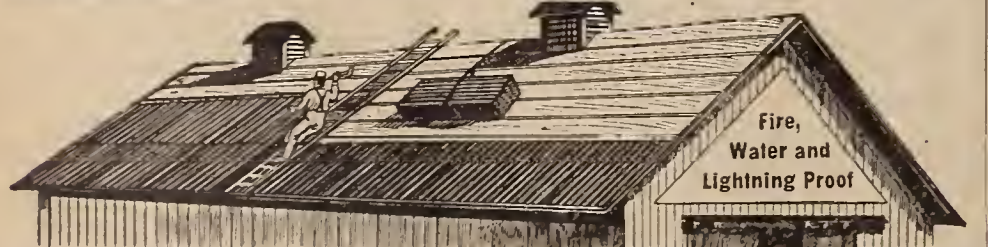
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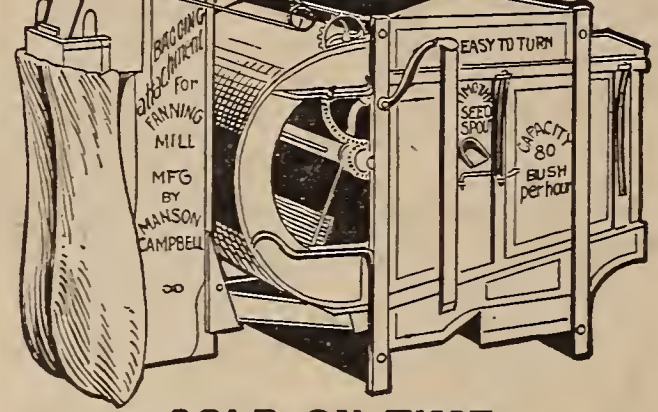
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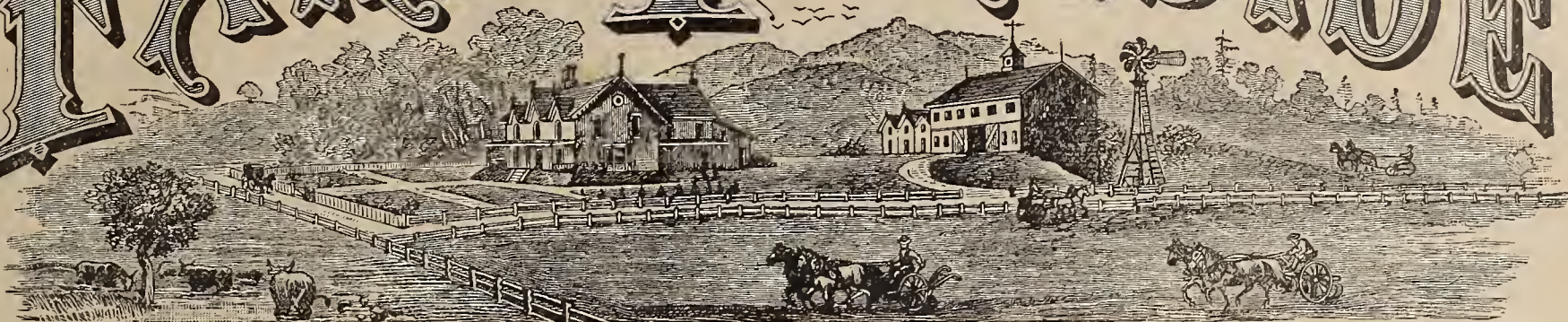
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# FARM FIRESIDE



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TERMS 25 CENTS A YEAR  
24 NUMBERS

## Home of "Birds in America"

By PHEBE WESTCOTT HUMPHREYS

LOUISIANA, Kentucky, Pennsylvania and New York lay definite claim to the honor of possessing the home of the famous naturalist, John James Audubon, while other states, and various cities and country places in different states, display relics and photographs of the home of the naturalist, who probably had more "homes" than any other famous author and student of his day if we must consider his residences of short duration in various parts of the United States, as well as in Canada and in Europe, while he gathered material and negotiated for the publication of his famous works.

When we speak of the "American home" of the naturalist it might be difficult to decide which of the many might properly be called his "home," but when we describe the home of "Birds in America" we have something definite for guidance, for the author himself described his Pennsylvania home as the place of inspiration and the source of the best material for this great work, although he did not commence its final publication until he had returned from several European trips—first for study, and afterward for introducing his works—and had settled in his New York home on the banks of the Hudson.

As the parents of the naturalist—John Audubon and Anne Moynette Audubon—were both natives of the commune of Coucroun, near the city of Nantes, in France, it was natural that on coming to America they should settle in Louisiana, which was then a French possession. John Audubon settled on a plantation near New Orleans, and it was there that his son, John James Audubon, was born the fourth of May, 1780. He was early taught the love of Nature, and found special interest in birds and animal life under the instruction of his father, who was a man of education. He was sent to Paris to pursue his education while he was still quite young, and in connection with his other studies he attended the school of natural history and arts, and took drawing-lessons from the celebrated David, which proved of great value to him in his later work.

He was about eighteen years old when he returned to America, and his father had then moved to Philadelphia. He assisted his father in mercantile business for a few years, but his desire for the woods and groves and the pursuit of his studies in the open country grew upon him, until early in the past century his father gave him a beautiful home among the hills of Pennsylvania—a tract of two hundred and eighty-five acres of land, with a grist and saw mill on the banks of the Perkiomen—which he had purchased some years previously.

This "first home of John James Audubon in America," after leaving his father's home, was an ideal spot

for the pursuit of his studies over a century ago, and it is practically unchanged to-day. It was here, on a woody hillside overlooking the picturesque valley of the Perkiomen, that he conceived his great work and laid its first foundation. It was here that he married Lucy Bakewell, the daughter of an Englishman and scholar on a neighboring plantation, whose library had been placed at the disposal of the young naturalist, and it was here that his eldest son was born.

Finding it necessary to engage in mercantile pursuits for securing the support of his family and con-

ville he spent some time at his father's home, and also at his father-in-law's plantation, adjoining his old home, and there began to make special preparation for the publishing of his first great work. It was during this period of his life that Mr. Blake, in his "Biographical Dictionary," speaks thus of Audubon: "His life was one of bold and fearless adventure, of romantic incident and constantly varying fortune. Hardly a region in the United States was left unvisited by him, and the most inaccessible haunts of Nature were disturbed by this adventurous and indefatigable ornithologist, to whom a new discovery or a fresh experience was only the incentive to greater ardor and further efforts in his favorite department of science."

His "varying fortune" and the ease with which he extricated himself from perplexing money difficulties are illustrated at this period of his work on "Birds in America." While he was traveling in upper Canada, fifteen hundred miles from home, on one occasion he mentions that his money was stolen from him, when he took to painting portraits, by which he got plenty to carry him home.

It was in April, 1824, that he first sought patronage in Philadelphia for the publication of his work, only to meet with discouragement. He says, in this connection: "America being my country, and the principal pleasures of my life having been obtained there, I prepared to leave it with deep sorrow after in vain trying to publish my illustrations in the United States. In Philadelphia Wilson's principal engraver, among others, gave it as his opinion to my friends that my drawings could not be engraved. In New York other difficulties presented themselves, which determined me to carry my collections to Europe."

To meet with better encouragement, he at last sailed for England, where he arrived in 1826. He commenced the publication of his work at Edinburgh in 1827, but afterward transferred it to London, where the first volume was completed in 1830, containing one hundred plates. William Swainson, in a review of this work published in the "Natural History Magazine" in May, 1828, says:

"The size of the plates exceeds anything of the kind I have ever seen or heard of. They are no less than three feet three inches long by two feet two inches broad. On this vast surface every bird is represented in its full dimensions. Large as is the paper, it is sometimes (as in the male wild turkey) barely sufficient for the purpose. In other cases it enables the painter to group his figures in the most beautiful and varied attitudes on the trees and plants that they frequent. Some are feeding, others are darting, pursuing or capturing their prey; all have life and animation. The plants, fruits and flowers which enrich the scene are alone still. These latter from their critical accuracy are as valuable to the botanist as the birds are to the ornithologist."

According to the early historians, the applause with which this work was received was enthusiastic and universal. The kings of England and France had placed their names at the head of his subscription list.

[CONCLUDED ON PAGE 19]



THE FAMOUS AUDUBON HOMESTEAD



ENTRANCE TO MILL-GROVE

tinuing his studies, John James Audubon entered into partnership with Ferdinand Rozier as merchants, and in the summer of 1809 the naturalist sold the plantation which had been given him by his father, and with his partner removed their business to Louisville, Ky.

Audubon confesses that he was not successful as a merchant, and that his love for the fields, the flowers, the forests and their winged inhabitants unfitted him for trade. On returning to Philadelphia from Louis-



# FARM AND FIRESIDE

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THE CROWELL PUBLISHING CO.

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**Postage-stamps** will be received in payment for subscriptions in sums less than one dollar if for every 25 cents in stamps you add a one-cent stamp extra, as we must sell postage-stamps at a loss.

**The date** on the "yellow label" shows the time to which each subscriber has paid. Thus: May 1904 means that the subscription is paid up to May, 1904; July 1904, to June, 1904, and so on.

**When money is received**, the date will be changed within four weeks, so that the label will answer for a receipt.

**When renewing** your subscription, do not fail to say it is a renewal. If all our subscribers will do this, a great deal of trouble will be avoided. Also give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on the label, to your letter of renewal.

**Discontinuances**.—Subscribers wishing their paper discontinued should write us to that effect and pay up all arrearages. If this is not done, it is assumed that the subscriber wishes the paper continued and intends to pay when convenient.

Always give your post-office at the beginning of your letter.

## Mr. Greiner Says:

**HORSE-MEAT**.—"Those who eat horse-flesh ought to acquire horse sense," says a writer. If the beef trust continues to do business on present lines many more people may be taught to abandon the absurd prejudice against a perfectly wholesome and not unpalatable food product such as the flesh of a clean and healthy horse. If people are willing to utilize it, rather than waste it, as is usually done, what man of horse sense could object?

**THE CORRUGATED CAPS** and cushions, which were exhibited at our recent horticultural meetings, and which are intended to protect the apples that come in contact with the heads of the barrel from bruising, are certainly a good thing, and no barrel of really A No. 1 fruit ought to be sent to market hereafter without them. Fruit that is not worth taking such pains with is not worth sending to market. For export purposes such extra protection for barreled apples and pears seems to be entirely indispensable.

**SEEDLESS FRUIT**.—From the Far West comes the announcement of a seedless apple. If such has really been developed it would hardly be an occasion for great astonishment. Years ago all the oranges we found in our markets were well supplied with seeds. To-day most of the oranges kept in our stores are entirely seedless. We also have seedless raisins. Mr. Burbank, I believe, has developed a seedless plum. Sooner or later we shall have the seedless apple. In short, we could easily believe this story if there had not been the information added that this apple develops without blossom. The reporter and the Western daily who gave this as a news item must imagine that this apple jumps out of the body of the tree or its branches, ready for harvest and in all its perfection, as Minerva, in full armor, with shield and spear, is said to have jumped out of Jupiter's head. The apple story is no less a fake than that from the Greek mythology.

**APPLES AND MORALITY**.—A Chicago daily tells "why apples conduce to morality." Most of its statements are faulty in point of fact, yet it comes to a correct conclusion—namely, that the free use of apples and other acid fruits is one of the most effective aids in the cause of temperance. "Long ago," says this paper, "the observation was made that the overfond of liquor had little taste for fruits, just as the man with great fondness for fruits cared nothing for alcohol." Anybody who has the faintest idea of the food constituents of the apple will hardly advance the claim that one can "balance his ration" by eating apples. It is simply the malic acid which acts as a tonic—Nature's medicine—and which produces those desirable results. It appeases that undefinable craving which so often leads to the cup that intoxicates. I believe we can do no better service to humanity and to the cause of true temperance than to grow and flood the country with acid fruits, and to encourage their freest use. Keep apples, strawberries, currants, gooseberries, grapes, etc., in their respective season within your children's reach all the time, and they will not be so apt to drown their craving for something (they hardly know themselves what) in alcohol. There is morality in apples.

**PHOSPHATES FOR GRAIN CROPS**.—A reader says he has a piece of land on which no fertilizers have ever been used. He can raise big buckwheat straw, but it does not fill, and he now wonders what kind of "phosphate" he had better use, and how much to the acre. This seems to be an easy problem. Wherever

straw grows fairly well, but will give short crops of grain, the plant-food most likely in short supply is phosphoric acid, and the application of any phosphatic manure can be almost certainly depended upon to give a considerable increase in grain. Superphosphates in such cases usually show striking, often remarkable, results, especially on buckwheat. The ordinary cheap acid phosphate, or dissolved rock, worth eleven dollars to fourteen dollars a ton, is the fertilizer that I would recommend first of all. It contains eleven to thirteen per cent soluble phosphoric acid, and may be used at the rate of three hundred to four hundred pounds to the acre. The two or three dollars an acre expended in this way may give you an increase of ten to fifteen bushels of buckwheat. On several occasions I have tried Thomas slag, sometimes offered as "odorless phosphate," on buckwheat, and secured about the same results as those from the dissolved rock. The slag contains a larger percentage of phosphoric acid—up to twenty-one or twenty-two per cent—costs a little more than the ordinary superphosphate, but its phosphoric acid is hardly as soluble as that in the other.

**THE LIME-SULPHUR-SODA SPRAY**.—Greater ease of preparation has induced many of us to use the lime-sulphur-soda wash rather than the lime-sulphur-salt combination, which in process of preparation has to be boiled. We make the wash from thirty pounds of lime, fifteen pounds of flowers of sulphur and four to six pounds of caustic soda, with enough water to make fifty gallons of wash. The lime is slaked by the gradual addition of about six gallons of hot water. We do not let the lime become dry at any time, nor add so much water at once as to "drown" it. The sulphur is made into a thin paste with hot water, then added slowly and mixed thoroughly with the boiling, steaming lime. The caustic soda is then added to prolong the boiling, always stirring thoroughly, and adding more hot water if necessary to make a thin mixture. When the chemical action ceases, the required amount of water is added, and we are ready for the immediate application. The whole process, except heating the small amount of water, can be carried on in a tub or half-barrel, and takes less than thirty minutes' time. This process, recommended by the New York State Experiment Station (Geneva) is simple enough, but possibly not quite so reliable as the old boiling method. The present season's tests will probably give us more light on this question. The San Jose scale is still with us. All we want of the wash is to kill the scale. If it does that we will be satisfied. The treatment will certainly have some good effect in checking fungous diseases, especially the dreaded peach-leaf curl, anyway. I hope that many of our friends who use the wash made in the new way will in due time favor us with their reports as to the outcome.

**CITY OR COUNTRY?**—I have lived a part of my life in the city—in fact, was born and bred in the city. Although I had no reason to complain of the "slavery of city life," yet after spending thirty years in the country, enjoying the full measure of its independence and manifold blessings, I know of no consideration that could tempt me to return to the city to live. I have just come across the evidence of a writer in "Country Gentleman," as follows: "I have lived twenty-five years in a great city. I was one of the discontented ones on the farm. . . . I know that work for the unskilled in the city means not only the hardest work, but constant anxiety as to 'tenure of office,' that comforts in the way of pure, wholesome food and good clothing, and pleasant or hygienic location as to home, are practically impossibilities. To this same class a grassy lawn, beds of flowers, a few fruit-trees and cow and chickens are absolute impossibilities, also. Perhaps an elevated train thunders over their roofs. Their children's playground is in the streets, and their sick are cared for in the public hospitals. An unusually hard season taxes to the uttermost the resources of charitable institutions. Children are robbed of their birthright by being forced to eat the bread of dependence, and have thus taken their first step on the road to 'pauperism.' People die of starvation in cities, and others who can't die opportunely commit suicide." In the main all this is true. After reading such descriptions of city life, given by one who knows, we will be apt to appreciate more than ever the advantages and blessings of independent country sojourn and occupation. Impress it on the young people! They don't know what they are yearning for when they wish to leave the farm and turn toward the city.

**PROFITS IN SPRAYING POTATOES**.—A number of our readers are asking about potato-blight, and how to prevent it, and whether it will pay to spray, etc. All authorities seem to agree on this one thing—namely, that the only way we can hope to fight potato-blights with any assurance of success is by spraying with Bordeaux mixture. We do not always have a full measure of success, which is generally owing to our failure to do the work as thoroughly and as persistently as it should be done. If the work is well done it pays well—there can be no doubt about it. How well it pays will appear quite strikingly by the following incident: J. V. Salisbury and Sons, of Phelps, N. Y., are growing potatoes on a fairly large scale. At first they were not convinced of the efficacy of spraying. Last year one of the sons offered to do all the spraying "on his own hook," for the increase of crop. The total gain on fourteen acres, resulting from five sprayings, was eight hundred and ninety-six bushels, worth at digging-time fifty cents a bushel, or in the aggregate four hundred and forty-eight dollars. The expense of spraying, wear on sprayer included, was fifty-five dollars and seventy-six cents, leaving a net profit of three hundred and ninety-two dollars and twenty-four cents. The yield to the acre unsprayed was eighty-three bushels, that sprayed, one hundred and forty-seven bushels, a gain of sixty-four bushels an acre from spraying. Each spraying cost on the average eighty cents an acre, or four hundred dollars for the five sprayings. The net profit to the acre amounted to twenty-eight dollars and one cent. Salisbury and Sons will spray all their potatoes this year, but will hire the work done by day-hands, and not make a bargain such as they made last year.

## Mr. Grundy Says:

**PROCRASTINATION**.—"I had bad luck last night," said a young farmer one morning early in March. "My best Duroc sow farrowed twelve pigs, and lost all but two of them."

"What sort of pen or yard did you have her in?" I asked.

"Well, it wasn't a very good place. It was not so tight against weather as it ought to have been, and as the night was colder than we generally expect at this time of year, the place was rather cold."

I asked him why he did not fix it up and make it comfortable. He said he ought to have done so, but kept putting it off and forgetting it. So it was not done, and the result was the loss of a lot of nice pigs.

There are many more like him. They know what ought to be done, and how to do it, but keep putting it off and forgetting until they meet with serious loss, and then they term it "bad luck." I have done the same thing myself. One likes to shift the responsibility for his misfortunes onto somebody or something else. When I attended school I used to write in my copy-book, "Never put off till to-morrow what you can do to-day."

The fellow who does things is the one who succeeds. The fellow who puts off until some other time is the one who is constantly meeting with "bad luck." I once called at the home of a little fellow who lived on a forty-acre farm, for which he had gone heavily in debt. In one corner of a little yard I noticed a shed about ten by sixteen feet covered entirely over with black felt roofing. I asked what it was, and was informed that it was a pig-house, and was invited to examine it. I found it was made up of all sorts of scrap lumber, goods-boxes, crates and old lumber bought at a sale, and covered with tarred felt roofing. A partition divided it into two rooms, the further one being used for a pig-nursery, and the outer one for the larger pigs. There was an opening about one by three feet above the door, protected from driving storms by a sort of hood, for ventilation, and when the door was closed the pigs inside were as snug as could be, no matter how cold the weather. He said the place cost him about six dollars, not counting his own work in building it. Three sows had farrowed in the further apartment during the meanest sort of weather, and not a pig was lost.

Quite often I have letters from people who tell me what they would do if they only had the proper sort of conveniences or the money to make them. If this little fellow had waited until he had earned money to build such a pig-house as might be found on the farms of well-to-do farmers, what would have been the result? "Bad luck," and probably bankruptcy. I am well aware that a man is under many disadvantages when he is short of ready cash, but when one cannot do one thing he should at once set about doing the next best thing. This little farmer's pig-house will last ten or fifteen years, and in that time prove to be worth hundreds of dollars to him. A young farmer of my acquaintance bought a new wagon, and he had no sort of shelter for it. In nine cases out of ten the wagon would have stood in the open yard, exposed to the weather, but in this case a dollar was invested in a load of poles, and two more in four-inch fencing. From these a small shed was built, and covered with roofing-felt, and the wagon stands under this. The entire cost of the shed was about five dollars, and it will actually save him more than double that amount.

**ANTI-FENCE-CLIMBER**.—A neighbor of a farmer I once worked for had a cow that was a splendid milker, but she would climb and break down almost any kind of fence that could be put up. Barbed wire had no terrors for her. She would work at a fence until she stretched it so that she could go either through or over, generally over. She kept her owner in hot water with his neighbors, but he objected to disposing of her to the butcher because she was such an excellent milker, and her calves proved equal to her. I told my employer that if he could buy her I would show him how to make a nice cow of her. He went straight at her owner with an offer that got her. When he brought her in we fastened a strong strap about her neck, and to this the smaller end of a light, strong pole about ten feet long. The pole hung low enough for her to straddle it if she wished, and the front end of it was full two feet in front of her—about a foot as she walked. She never climbed another fence, but several times we had to render her some assistance in getting away from one she had tackled. Her former owner had tried several kinds of "pokes," but she had always managed to either break them or work them over the fence. The last two months I was there she had apparently given up fence-climbing entirely, and had become a respectable cow.

**HARDY FLOWERS**.—A lady reader of FARM AND FIRESIDE in Wisconsin asks me a number of questions about flowers. The thing she wants, she says, is "some kind of hardy, strong, pretty flowers that will bloom a long time and almost take care of themselves, because I have too much to do to give them much care." I would suggest perennial phlox as coming nearest to filling the bill. It is hardy, and will almost take care of itself, while it is very pretty, and blooms a long time. I have one that is as white as snow, and as soon as the first blooms are off I take a pair of small scissors and cut off the seed-pods, and am rewarded with a succession of blooms—not a few, but lots of them—until frost. I think it is better to purchase the plants of some of the dealers in plants (several advertise in FARM AND FIRESIDE) than to buy seed, because they are somewhat difficult to start from seed. A half-dozen plants can be had for very little, and each one may be a different shade of color. I have grown perennial phlox along the edge of my lawn and in groups back by the spruces, and am more pleased with it every year.



### The Egg-Marketing System of Denmark

THE methods of collection and the testing and disposing of eggs as practised in Denmark are well worthy of imitation in this country, notwithstanding the reluctance of farmers to organize for coöperative advantages and mutual protection. In former years, and until the coöperative idea had become popular in Denmark, egg-dealers were subject to frequent losses. The farmers then cared more for a little temporary gain than for their reputation, and frequently branded the eggs for market as "new laid" when they had been laid away for weeks awaiting a rise in the market price.

By the newly adopted method all this has been changed. The coöperative share system is now general in Denmark, and absolute honesty in dealing has proved to be the best policy. In each district there is a collective center, and a covered wagon from this center calls on the members of the society twice or three times a week. Each farmer is required to collect the eggs from the nests twice a day, and must know that they are all freshly laid. He is given a small rubber stamp which bears the name of his farm, and a dating-stamp, with which he is required to stamp the thick end of each egg as soon as collected. By this method, should any damaged eggs be found, the farm from which they came is at once known, and the farmer is made subject to a heavy fine. The association committee will consider no appeal, as it is their duty to maintain Denmark's reputation at all hazards. When a farmer is found guilty of several attempts to defraud the association, he is at once discharged from it. Whenever there is a disagreement between himself and the collector, the matter is referred to the committee of management, whose decision is as unalterable as the laws of the Medes and the Persians.

In collecting the eggs from the farmers the collector must in no case take bad, dirty, old, cracked or badly stamped eggs. All eggs must be delivered clean. No eggs must be washed, but they may be cleaned with a soft, damp cloth. The eggs when collected must be kept in a dry, shady place, where the temperature is uniform, especially during very cold or extremely warm weather. At each collecting-center there are electric machines for testing the eggs, which show at once whether any of the eggs have been held over longer than the date on the egg indicates. The eggs when prime are properly graded, packed and weighed, and each package is marked to show the exact weight of the eggs and the standard of quality.

Farmers' organizations, such as the grange, would find it to their advantage to adopt such a sensible business plan. This method brings the producer and the consumer together without the necessity of employing an unnecessary number of middlemen. With the comparatively new system of bonding, each agent who attends to the selling of farm products or the purchase of farm supplies, and who receives a regular salary, could and should be required to give a sufficient bond for the protection of each member of the association.

W. M. K.

### The Fifteen-Acre Farm Sold

FARM AND FIRESIDE readers who read the account given some time ago of Rev. J. D. Detrich's remarkable little farm will be interested to know that he has sold his farm, Jersey herd and all his farming-implements. I think we may therefore consider that most interesting chapter in the story of American agriculture closed.

The buyer is a Philadelphia man, and it is not supposed that he will take up the intensive work where Mr. Detrich drops it. The property was not sold because it was not profitable, but because the price offered was higher than Mr. Detrich cared to refuse. Good farming-land is too plentiful and cheap for a man to sentimentally keep on farming land that will sell for more than a thousand dollars an acre.

This little farm and its late owner have the distinction of demonstrating that two cows may be profitably kept on each acre farmed, with but a moderate outlay for commercial feeds. Mr. Detrich has abundantly proved that substantial profits may be made from a small farm intelligently managed; that by constant heavy cropping of the land, and saving all manure and using it as fast as it is made, the production of the land may be increased marvelously, even without the use of lime or commercial fertilizers. It is not known that he has ever had to use litmus-paper to ascertain the acidity or alkalinity of his soil. He simply applied all the manure he could collect, and made the tillage always perfect. He was not afraid of wearing out the land by continued intensive cropping, nor of wearing out his cows by feeding them enough year after year. Under his treatment his herd grew better and his land richer.

From a private letter he wrote me, telling me of his sale and future plans, I quote the following:

"The herd has been doing well all winter. I have plenty of hay, silage and bedding, as usual. I have sold three hundred dollars' worth of bulls since January."

Mr. Detrich will take charge of a large farm in Chester County, Pennsylvania, where it is probable he

## All Over the Farm

will install his intensive methods on quite an extensive scale. If he shall demonstrate that he can as successfully manage the large farm on his plan as he unquestionably did the small one, he will work wonders indeed.

W. F. McSPARRAN.

### Colorado Grass

My attention was first called to the Colorado grass in the cotton and corn fields of the Brazos bottoms. It comes in these fields after they are laid by, and furnishes fine summer and fall pastures and makes excellent hay. It is a native of Texas, having its home in the dry western plains at the head of the Colorado and Brazos Rivers. The seed drifted down the streams, and got scattered along the bottom-lands of these rivers. Most of the Colorado grass, however, has come from seed sown by the farmers.

The habits of this grass are similar to those of crab-grass, to which it is superior, however, as a forage plant or as hay. Its leaves are longer than those of crab-grass, and very much broader, and its stalk is larger and taller. Its seed is also much coarser. One seed, as with crab-grass, produces a large tuft of grass, stooling at the roots and branching at the joints, also. While it has a spreading growth, it is more upright than crab-grass. The seeds do not germinate until hot weather, and the plants have the power to stand drought well. The seeds remain in the ground until a favorable time, when they sprout and begin their growth. Fields that contain the seed or that are seeded by the farmer produce excellent pastures or hay-fields if broken and harrowed any time during the summer.

I have observed the Colorado grass on sandy soil only, though I feel sure it will grow any place where crab-grass will, and give much more satisfactory results.

Hay from this grass sells well on any Texas market, both loose and baled. Stock are fond of it. I have known corn and cotton fields to produce more from the crop of Colorado grass growing in them than from the corn or cotton.

A grass that is so desirable in Texas would no doubt prove satisfactory in other Southern states.

JOHN C. BRIDGEWATER.

### Oxeye Daisies

The oxeye daisy is a very troublesome weed. Once it gets a start it is difficult to eradicate, so the best plan is to guard carefully against its introduction. The greatest damage is done to pastures, where the daisy will soon crowd out the grass. As soon as a plant is found in a field it should be dug out, roots and top, and destroyed. To simply dig it up and throw it aside is useless, as the plant is very tenacious of life, and will survive a great amount of exposure and rough treatment.

Fields which are badly infested should be plowed early in the spring, then cut up thoroughly with a disk-harrow. Then plant some crop that will require frequent cultivation, so the daisies will not have an opportunity to grow. If after cultivation ceases the daisies are not killed out, the best plan is to disk-

good standard kind—not of the more costly imported kind—and one part of clean, fine sand are mixed well with cold water, and immediately applied. This gives a light brownish white that is not so glaring as the common lime, and has been found to resist moisture better than any other wash. It adheres firmly to brick or stone or wooden walls or fences. In its application the walls are first wet with water, by which the adhesion of the wash is made stronger than if applied to a dry surface.

### Notes and Comment

The Puget Sound cauliflower-seed has been found to be equal to the best Danish-grown seed.

The Dwarf Essex rape is a success in a dry season, but like tobacco and alfalfa, it must have strong ground.

The leading potash-consuming crops are tobacco, buckwheat, barley, hay, forage, corn fodder, beans and oat straw.

Sandy land without a good subsoil of clay is ever hungering for more and constant feed. One meal of fertilizing material for clay is equal to three meals for a light, sandy soil.

Even in England the choicest varieties of potatoes are procured from northern Scotland. The Northern Star is claimed to be the most disease-resisting and weather-defying variety.

September 27th is to be "Apple Day" at the World's Fair in St. Louis. The idea originated with Mr. John T. Stinson, superintendent of pomology, Department of Horticulture. A good idea.

Probably few of the recently issued farmers' bulletins will prove more valuable to the practical farmer than No. 22, "The Feeding of Farm Animals," and No. 55, entitled "The Dairy Herd."

There is a growing tendency on the part of Western handlers of eggs to first grade the spring supply carefully, then place them in the nearest cold storage, and in the fall ship them to Eastern houses for storage and winter sale.

The supply of Honduras mahogany is not likely to be exhausted, since the government requires that whenever one tree is exported three others must be planted. Every owner of a wood-lot would do well to adopt the same plan for the benefit of a grateful posterity.

Current reports indicate that Mr. John F. Spencer, a well-known fruit-grower at Grand Junction, Col., has, after seven years' experimenting with a secret process of budding, succeeded in producing a seedless apple that is said to possess many very desirable qualities.

The Salem (Oreg.) Canning Company has contracted for the growing of one hundred acres of sweet corn for canning purposes. Ten thousand cases of corn are to be packed during the coming season. Up to this time the canned sweet corn that has been used on the Pacific Coast has been canned mainly in the East.

Very many important discoveries have been purely accidental. It is said that the origin of the sulphur-lime-and-salt spray is attributed to the throwing upon some scale-infested fruit-trees as a cure for scab some of the mixture used when dipping sheep.

Dr. S. A. Knapp, special agent for Texas and Louisiana of the United States Department of Agriculture, has begun his war on the cotton-boll weevil. He will not be caught napping in this new field of work any more than in promoting the rice industry, with which his name has been so favorably identified.

There is no question that the sections of country where irrigation is being inaugurated are rich in possibilities which our young men should hasten to make available for themselves.

The lesson of the hour is, "Go where irrigation is making the so-called desert lands to become the most fruitful fields on earth."

Having an eye to business, the Chicago and Northwestern Railroad Company has contributed sixteen hundred dollars to Lee County, Illinois, to build a good turnpike, so that the grain in that county can be more readily marketed than formerly. Such action on the part of this enterprising company might be advantageously imitated by all railway lines which rely mainly on the patronage of grain and stock growers.

### Better Read It

On page 23 of this paper we offer several free trips to the St. Louis World's Fair. Almost any one could secure a trip. Read about it.



THE OLD STONE BARN WHERE AUDUBON COLLECTED HIS FEATHERED TROPHIES HAS BEEN ENLARGED

harrow and plow the ground again in the fall, and sow wheat or rye.

N. G. SAXTON.

### Missouri Good-Roads Idea

Secretary George B. Ellis, of the state board of agriculture (Columbia, Mo.), and D. Ward King have been in consultation for two days preparing to issue a third edition of the famous Road-Dragging Bulletin. The second edition was quite large, but is exhausted, while the demand continues to grow. The "Missouri idea" is gaining favor with road-makers. Not only is Mr. King in great demand in his own state, but already has engagements in other states for 1905. No other single "good-road" suggestion has gained recognition so rapidly, nor is there any to-day that is making the rapid advance seen in the progress of this Missouri split-log idea.—Twentieth Century Farmer.



## Gardening

By T. GREINER

**GROWING BLUEBERRIES.**—A reader in Iowa asks whether blueberries are the same as huckleberries, and where plants can be procured. The term "huckleberries" is often applied indiscriminately to all fruits of this class belonging to many species. The highbush blueberry, which seems most adapted to cultivation, is also known as "swamp huckleberry." I believe that some of our nurserymen offer plants of it, but I have no catalogue in my possession that quotes it. The best way is to get the plants direct from the nearest blueberry-swamp, cutting out chunks of soil with a plant in each, and transplanting them to good garden soil, where a generous mulch of rotted sawdust or something similar should be provided. There may not be a great deal of immediate profit in this, but it may prove to be highly interesting, and therefore satisfactory for that reason.

**MANURE FOR THE GARDEN.**—A Canadian reader asks if fresh manure when free from straw is as good for the garden as old rotted manure. Usually I recommend old compost, or well-rotted stable manure, as the best thing for the garden, and I want it in large quantities—forty, fifty or more two-horse loads to the acre, or all that I will be able to plow under and get well mixed with the soil. For potatoes especially I prefer such manure, and even then desire to apply it in the fall, or still better, to the crop of the year before. In my every-day practice I make use of fresh manure, or rather the manure that is accumulated during the winter, and consists largely of animal (horse and cow) droppings, with only a small amount of straw or shavings, for all garden crops, at times even for potatoes. I have most excellent results from this manure. With me it is "anything I can get," and the more the better.

**CHICKWEED AS MULCH.**—Thus far I am quite satisfied with my experiment of using chickweed as a mulch for the strawberry-patch. Of course, as I said before, the experiment was like making a virtue of necessity. The chickweed grew whether I wanted it or not, and it covered the entire patch with a thick mat of verdure. After the past severe winter the strawberry-plants come out in first-class condition. They rested peacefully under a close and tight blanket of decayed chickweed. I could lift that blanket off almost as one would a sheet or bed-blanket, and the strawberry-vines underneath are green and fresh, and the earth mellow and sweet, free from weeds, so that it is the easiest thing in the world to get the patch cultivated and put in the best shape for the application of a mulch of rotted sawdust or shavings. Whether the chickweed would have been killed out so completely in a mild winter, however, may well be doubted.

**PLANTING ASPARAGUS.**—A lady reader in Franklin County, Ohio, asks about planting asparagus. A neighbor of hers has buried his asparagus-plants twenty inches deep, and she rightly thinks that it is too much. My advice is to plant an asparagus-bed any way. The plants will grow and be of service whether set six inches deep or two or three times that much. My people like nicely blanched stalks. These are delicious when quickly grown in very rich, loose and warm soil. The old method was to spade out the bed to the depth of eighteen or twenty inches, fill in with old compost, say a foot deep, then plant the asparagus-roots in good soil on top of the compost, and finally cover with the good soil. I now set my roots about eight inches deep in rows at least four, or better five, feet apart, with two-foot space between the plants in the rows, which latter are to be hilled at the beginning of the cutting-season. Of course, no stalks are cut from a new bed the first season, and only a part of them, if any, early the second season. I aim first of all to establish good strong roots, that are ready the third year to furnish a full crop of fine asparagus. Any extra pains, in the way of manure application or cultivation, pays exceedingly well with asparagus. If green stalks—that is, such as are wholly grown above ground—are desired (and some people think they are tenderer or of better flavor than the blanched ones), the roots may be set only five, or even four, inches deep.

**GOOD CAULIFLOWERS.**—A lady reader tells of her disappointments in trying to raise good early cauliflowers. The cauliflower-plant is a rather particular vegetable. When we plant early cabbages, and succeed in saving them from the greedy jaws of maggots and flea-beetles and other enemies, we are fairly sure of growing good heads, provided we raised the plants from good seed of good strains, and set them in suitable, well-enriched soil. With cauliflowers success is not quite so sure. Sometimes the plants refuse to make close and solid heads, and we find it difficult or impossible to discover the reason therefor, unless we are ready to blame the seedmen for it. Indeed, a good deal, so far as the final outcome is concerned, depends on the use of the right kind of seed. Cauliflower-seed is costly—in fact, an ounce of it is worth as much as a pound of the best cabbage-seed. There will always be some temptation for unscrupulous dealers or plantmen to use cheap and unreliable seed. Oftentimes seedsmen themselves may be deceived by seed growers or jobbers. Don't believe that you can depend on cheap cauliflower-seed. Get the best. Strains of the Extra Early Erfurt, or Early Erfurt, which includes Early Snowball and some of the Prize Earliest, whether imported from Europe or grown on Long Island or Puget Sound, are usually dependable if planted on good soil and somewhat protected from excessive heat and drought. The soil must contain a good lot of potash, for a crop of cauliflowers requires hundreds of pounds to the acre. When the heads are forming, and the weather is hot and dry, break some of the outer leaves over the top of the head, so as to protect it from the direct sun-rays.

**PEANUT CULTURE.**—Some one in Tennessee desires some information on peanut-growing, especially how much seed is required, and how the planting, cultivating and harvesting is done. I do not claim to be an expert in this branch of soil culture, but at various times I have planted a small patch in my garden even here at the North. In New Jersey, on warm sandy loam, I have had fair success with the crop, especially when planting the newer early "Spanish" peanut, which has small but well-filled pods, and these all clustering together near the main stalk. Here in western New York, on soil more inclining to clay loam, my success even with this early variety has been nothing to brag of, simply because the summer season is too short and cool for ripening the peanuts properly. But my efforts have been well rewarded, nevertheless, in the interest that this unique crop adds to the garden-work. In some of its habits of growth and seed-production the peanut differs so much from ordinary garden crops that aside even from its reputation as a semi-tropical plant it cannot fail to arouse our interest and curiosity. For the commercial peanut-grower in southeastern Virginia and the Carolinas, etc., the plant is interesting simply as a money crop. My friends there tell me that they find from one to one and one half bushels of peanuts in the pod sufficient to plant an acre. The seed will as a rule germinate all right whether you plant them with the pod or shelled. But as we want only one plant in a place, and not two, as we would get by planting a whole pod, the general practice is to shell, or hull, them, which of course should be done by hand in order to prevent the splitting of so many nuts. The plant is tender, and a light frost will destroy it. It should therefore not be planted at the North until the weather has become summerly—say along in May or even early June. In Tennessee, Virginia, etc., the growers may begin planting somewhat earlier and up to along in June. The rows are usually made two and one half to three feet apart, and the nuts planted one inch deep a foot apart in the row, and the soil well firmed over them with the foot. Cultivate and hoe as you would corn. The weeds must be kept down, and the soil well loosened around the plants. When most of the pods have matured, or at any rate before frost, if possible, the plants are pulled, which may be done with the help of a plow with narrow mold-board and pitchforks. The earth is all to be shaken off the roots, and the vines spread out to cure, or immediately shocked up, as is often done with field-beans. When properly cured the pods are picked off and spread in a thin layer to dry, so as to stand storage in bulk without heating. Virginia growers use a sieve for cleaning the nuts, such as I am using (and have mentioned and illustrated before in these columns) for cleaning Barletta and other pickling-onions. That is about all that I know about peanut-growing.

## Fruit-Growing

By S. B. GREEN

**SAN JOSE SCALE.**—M. E. R. Nottingham, Pa. The twigs which you inclosed are infested with San Jose scale. This will require some radical means for its destruction. As you probably know, this is one of the worst insects that we have, and infested trees are very sure to be destroyed. I would suggest that you correspond with your experiment station as to the best method of its eradication. The address of your station is State College, Pa.

**TRIMMING ARBOR-VITÆ.**—F. E. C., Byron, Minn. The arbor-vitæ is of easiest culture, and naturally takes on a very good hedge form. For good results it is best to begin with plants under three feet. The plants may be pruned at any time during the growing-season, preferably from the middle of May to the last of June. If I were setting out plants two feet high that were rather slender, I should cut the tops off, when I set them out. This will cause them to branch, and then they can be pruned in as they grow. I think that it is a great deal better to keep the soil well cultivated around them than it is to mulch them.

**GRAPE-ROT.**—F. J. W., Pineapple, Ala. The rot of the Concord grape, of which you complain, can probably be prevented entirely by spraying with Bordeaux mixture. This should be applied as soon as the flowers have fallen, when the fruit should be thoroughly covered. This application should be repeated about once in two weeks until the grapes begin to color, when it is doubtful if you will have any serious injury thereafter. Bordeaux mixture for this purpose is made as follows: Slake five pounds of lime in about two gallons of water, and make a milk of lime; dissolve five pounds of sulphate of copper (blue vitriol) in two gallons of water in an earthen or wooden vessel. In a barrel place forty-six gallons of water, and pour the milk of lime and the dissolved blue vitriol into it at the same time, and stir vigorously. This material should be applied with a spray-pump.

**GRAFTING-WAX.**—J. D., Ballard, Wash. A good grafting-wax is one that will not become too soft in summer, so as to melt and run down the stock, or so hard in winter as to crack and split off. A very reliable grafting-wax is made by melting together by weight four parts of resin, two parts of beeswax and one part of tallow. When well melted, pour into a pail of cold water, grease the hands slightly, and pull the wax until it is about the color of pulled molasses-candy. Make into balls, and store for use. This wax should be warmed when applied. If it is too hard, more tallow and less resin may be used. Some propagators use linseed-oil instead of tallow. Clay is frequently used for covering wounds made by grafting, and it gives quite as good results as any of the waxes if properly applied. For this purpose some very tenacious clay should be used, and it is thought to be improved when mixed with about one third fresh cow-dung and a little plasterers' hair. The whole mass

should be thoroughly worked over before using. For a good book on grafting and general fruit-growing I would suggest that you get "Amateur Fruit-growing," price fifty cents, published by the Farm, Stock and Home Publishing Company, Minneapolis, Minn.

**GRAFTING—SPRAYING—TWIG-BLIGHT.**—A. W. H., Amboy, Minn. Grafting on large apple-trees should be done in the spring about the time that the buds begin to unfold. I should prefer to cut the scions as soon as may be if I had failed to cut them in autumn, and to store them in sawdust or sand, either buried outdoors or in a cool cellar. The number of grafts to insert in a tree will vary very much with the size and shape of the tree. Generally three or four grafts in a tree are enough in most cases for trees three inches or less in size.—I do not think it will pay to spray apple-trees when you are not troubled with any particular disease or insect. There is no use in spraying at all unless you are doing it for a purpose. If the scab on your fruit is troublesome, I certainly should spray with Bordeaux mixture, as this is a very satisfactory remedy for it.—I do not think there is any danger of increasing the susceptibility to twig-blight in the case of the Wealthy apple-tree if it is grafted on the Transcendent, except where a portion of the Transcendent top is left on.

**CHEAP WIND-BREAK.**—M. J. S., York Springs, Pa. If you haven't the means to start a wind-break of evergreens, I think you had better not attempt to grow them from seed. A much better way would be for you to buy one hundred to two hundred small seedlings, which you can purchase for about two dollars a hundred. These you could set out in your garden for a few years, until they became large enough so they could be removed to permanent planting. With most small evergreens it is a good plan to make a little shade over them for the first season. This should consist of a frame covered with lath put on with a space of about two inches between them. The lath should run north and south, so they will make a partial shadow over the bed during the day. The reason why I think you had better not start with evergreen seed is that considerable special care is required when the seedlings are young, as they are very tender until after the first year. I would suggest that you use either Norway spruce or white pine for your evergreen wind-break.

**APPLE-TREES NOT BEARING.**—J. H. M., Faribault, Iowa. In regard to your trees that are very thrifty, but do not bear, I will say that this is a common complaint of the Peerless apple. The original tree was a heavy bearer, and I believe that these trees of yours will eventually come into heavy and profitable bearing. On the other hand, it seems a long time to wait, and I am inclined to think that I should girdle a few of them, in order to bring them into bearing. To do this I would use a cross-cut saw, and just cut through the outside bark, and perhaps an eighth of an inch into the sap-wood, going completely around the tree, but spirally. I am inclined to think, also, that you have too many of this one kind, and that you will probably get better results if you top-work a few of them with some of our better varieties, such as Wealthy or Patten's Greening. The latter is a variety that is generally successful in Minnesota and northern Iowa. The girdling as here suggested will not hurt the trees, and the chances are that it will result in bringing them into bearing next year. The proper time to do this girdling is about the middle of June.

**BUDDING OLD PEACH-TREES.**—M. B., Martin, Va. Peach-trees are generally too large at two years old to be successfully budded, and when they are older than this I am sure that it will seldom, if ever, pay to attempt to bud or graft them. They develop so quickly that it is much better to throw away the older seedlings and start this spring with the pits, which will produce seedlings big enough for budding by the middle of August, provided they are grown on good soil. The best time for budding in your vicinity would depend somewhat upon the season. If you have good growing weather in August, the chances are that budding of peaches should not be attempted much before the twentieth of the month. If, however, the season is very dry, it is quite likely that the budding should be done earlier. A good rule to follow is to do the work as soon as the buds are large enough to handle conveniently for inserting. Of course, this work must be done when the bark peels, and if it is put off until late in the season, or until drought or insects have hurt the trees, then the bark will not peel, since it only does so when the trees are growing vigorously.

**CHRYSANTHEMUMS.**—S. H. D., Ammons, Ky. Where chrysanthemums are flowered in the open air, as is customary with the old-fashioned kinds, and also in favorable locations with some of the best modern kinds, but little care is generally given them. If, however, large blooms are wanted, the plants should be trained to from one to four or five good shoots, depending upon the strength of the plants. These should be carefully trained to stakes, and when they begin to show flower-buds, as they will in August, all but a few of the flower-buds should be removed. This will result in the large blooms such as are grown by professional florists. If it is the intention to grow the plants for flowering in the greenhouse in autumn and winter, cuttings should be made in March or April, and should be carried along through the summer in pots. They should be staked, and trained to four or five good blooms each. Cuttings made as late as July 1st make nice little plants and bloom well. A simpler way, in the case of the home garden, is to grow the plants from cuttings, set them out early in the spring, as they will stand fully as much frost as cabbage, and allow them to remain in the open air until the buds begin to form, when they should be potted off and the buds thinned out by pinching. Treated in this way they will give good results in the house.

### Cash if You Want It

If you win a trip to the St. Louis World's Fair and don't want to go, you may have the equivalent in cash. See page 23.



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## Poultry-Raising

By P. H. JACOBS

### The Young Turkeys

It is sometimes difficult to raise young turkeys, but if they are kept dry and warm, and confined for a few days after being hatched, until they become strong enough to be allowed out of the coop, there will be fewer losses in the brood. Dampness is more fatal with them than cold, but the greatest drawback to the young turkey is the large louse on the head and body.

### Scabby Legs

Scurvy legs, or scabby legs, will now appear more so than later in the year, but the difficulty is easily cured and prevented. Fowls with scabby legs are very unsightly, and should be treated at once. Simply apply a mixture of melted lard and sulphur on the legs once a week for four or five weeks, and the scab will disappear, it being the work of a minute parasite, which is destroyed by oil or grease of any kind.

### Breeders and Success

The requirements of pure-bred poultry are constantly growing more and more imperative, owing to the demand by the people generally—the farmer as well as the fancier. The tendency of competition certainly demonstrates this to be an age of necessity. Rewards are not to be accorded to the amount of noise we make, but to the quality of the exhibits; and certainly the more spiritive the competition, the better must be the systems adopted, the administrative ability of the fancier being put to the test. Surely every one will agree that the profits in any business are greater or smaller, according to the management of that business, and we ought therefore to train ourselves to avoid all the mistakes and calamities that have proved disadvantageous to success.

### Roup Remedies

A perfect cure of malignant roup is rare, for which reason the FARM AND FIRESIDE can give no reliable remedy, as such is unknown. It is as difficult to eradicate roup from the flock as to eliminate consumption in some human families. When it is considered that a remedy to be effectual should be given

### Summer Precautions

Provide dust-baths for the fowls. The dust should be put in large boxes, and kept out of the rain. Whitewash the houses, adding one gill of crude carbolic acid and one pint of common kerosene to each pailful of slaked lime. Lice will attack chicks at all ages, even in winter. Chicks require warmth at all seasons, and the most critical period for young chicks is between the time they drop their downy coats and before they put on a full dress of feathers, at which time they must have the very best of care, or they will sometimes drop off with but very little indication of disease or other difficulty. After the young chicks are fully feathered they are strong enough to help themselves, and will no doubt thrive if they have plenty of food and are kept well sheltered.

### Ground Oyster-Shells for Chicks

The value of ground oyster-shells has long been a matter of discussion, and the New York (Geneva) Experiment Station now makes known that recent experiments show that ground oyster-shell seems to interfere with the proper use of other foods for chicks. The addition of pure glass sand was of advantage, and the use of phosphate rock gave better results than sand alone, while the combination of sand and phosphate rock made heavier and stronger chicks. As ground or cut bone is mostly phosphate of lime, the experiments seem very favorable to the use of bone.

### Inquiries Answered

**GOSLINGS DIED.**—E. B. D. Lakewood, Ill., "lost many goslings last year, they first becoming weak in the legs. They were fed mostly on corn-meal, but had access to grass." The cause is probably due to lack of variety in the food. Animal-meal and bone-meal should have been allowed with the corn-meal, the latter having probably been supplied too liberally.

**GAPES.**—W. H. W. Weston, Ohio, states that "gapes have destroyed his chicks for two years. All remedies have been tried, and he desires further suggestions." It will now be best for him to use new ground, on which no chicks



ROY SMITH AND HIS CHICKENS

at regular hours, the care and labor bestowed upon a flock of sick fowls, even if it be possible to effect cures, would entail an expense greater than their value.

### Goslings and Ducklings

Goslings and ducklings grow very rapidly, but frequently show signs of lameness when nearly grown, and are also afflicted with vertigo. The cause is due to feeding too largely of ground grain. During warm weather they will thrive better if allowed nothing but grass. All aquatic birds require bulky substances, and will not thrive on a diet of exclusively concentrated food. Animal foods, such as meat-meal, finely ground bone, etc., are also excellent for such birds. A Pekin duckling if forced by high feeding from the time it is hatched will weigh five pounds when ten weeks old, costing about thirty cents for food, and selling for double that price.

### Club-Raisers' Notice

FARM AND FIRESIDE is going to send several of its club-raisers to the St. Louis World's Fair, and pay every necessary expense of the trip from the time they leave their own homes until they return again. See page 23.

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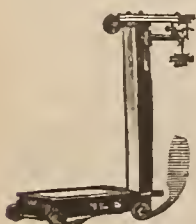
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## Live Stock and Dairy

### A Texas Dairyman's Letter

I AM A dairyman, market-gardener and poultry-raiser. If you like, send me say a dozen sample copies of the FARM AND FIRESIDE and the "Woman's Home Companion," and I will get you some subscribers. My wife, who has her own buggy, is an excellent can-vasser—has the gift of gab, and can talk fifteen to the dozen.

I am farming five hundred acres; have forty acres in corn and forty in cotton. Your able contributors hit the right nail on the head. I agree with them perfectly, especially about "The Old Cow"—one of the best articles I ever read. I allow no whips, sticks, rocks or dogs on my place, and say to one and all, "Come and see my cows." I have raised them all. There is no hooking nor kicking—there is nothing for them to hook or kick for.

During a large pasture-fire a short time ago my cattle got hemmed in between two fires, and I went to their rescue. There was no way of getting out except by pulling down a wire fence, posts and all, with my hands. I then went to my herd of cows, that stood looking on. I caught hold of the leather strap around my old cow's neck (a pure-blood Holstein, that milks four to four and one half gallons a day), and she walked alongside of me like a dog. I called to the others as loud as I could—the smoke was so dense I could see but two—and started for home on the windward side of the flames, which were roaring far above our heads, the hedges having caught fire. Almost choked, I staggered, and would have fallen had I not kept a tight hold on my dear old cow's neck-strap. She held bravely on through fire and smoke, dragging me with her. The others followed close behind, although some of them were scorched. I saved the whole herd, thanks to being kind to them.

My cows, yearlings and calves are all well fed during the winter. One of my cows had a calf April 4, 1903, and it is now as large as some of my neighbor's two-year-olds. My wife says I feed too heavy. I tell her that when my cattle tell me so I will quit feeding them. I mix one hundred pounds of fresh bran, one hundred pounds of cotton-seed meal and one hundred pounds of corn-meal, or shorts, and give the cows ten pounds a day. The others are fed according to size—the calves about two or three pounds a day and one teat of milk morning and night. During the winter all the cattle have all the bright hay they can eat. No damaged stuff is fed to my herd, thank you. If any hay is damaged, it is used for bedding either in the cow-pen or stable. The cattle have pure and clear well-water all the year round, are curry-combed and brushed, and have cloths thrown over their bodies to keep off flies during milking-time. I dearly love my cows.

F. G. SMITH.

### Our Way of Management

I feed my milk-cows good clover and timothy hay, with corn-stalks sandwiched in, and ground feed in small quantities. I do not believe in pushing a cow all she will bear a part of the year, and cutting her feed off in summer.

Noticeable among my cows is a half-breed Holstein that is truly a wonderful breeder and milk and butter producer. I average four hundred and fifty pounds of butter a year from her on two quarts of grain a day and what hay and grass she will consume.

I feed the calves on new milk the first ten days, then skim it, and add a porridge made by boiling a teacupful of oatmeal in a little hot water to each three quarts of skimmed milk, and stir until it is about the heat of new milk from the cow. This I feed to them three times a day.

If you will peep into my sheep-cote you will see on each side of the walk little pens just large enough for one ewe and her young.

In the first pen is a ewe and triplets. In eight pens there are twins—eight sheep and sixteen lambs. In six pens there are one ewe and one lamb each. There are twenty-five lambs in all from fifteen ewes. The sheep are all the Shropshire breed.

I feed the ewes with ground oats, bran and wheat middlings—about a quart to a feed. I scald the grain, then add cold water to make a good warm drink. This I give night and morning, with timothy and clover hay. At noon I give water and whole oats in small quantities. The lambs will eat the clover and oats by the time they are two weeks old.

I read an article that said, "It is better

to let the weak lambs die than to try to raise them," but I do not think so. Two of my lambs were just alive when I discovered them. I quickly brought them into the house, put them into a tubful of warm water, covering them all over but just the nose, then rubbed them until they had life enough to bleat. I then placed them on a warm blanket, rubbed them dry with a towel, covered them with the blanket, and placed hot bricks around them. In a short time they got up and walked around the room. I fed them with warm cow's milk through a nursing-bottle until the ewe had plenty of milk for them. They are the largest lambs and the strongest I have in the flock. The good shepherd cares for his sheep.

C. B. H. SOMMERS.

### The Value of Heredity

Breeders of pure-bred animals are very often charged with putting undue stress on the value of heredity and its quality of prepotency. There is no doubt that there are many good animals, in the dairy breeds of animals especially, in which there is the very refinement of desirable heredity, with the important force of prepotency absent or inactive. This is seen in cases where good sons of famous sires, carrying in pedigree the great performances of many generations, and in their bodily points—by which good animals are judged—many excellencies of their breed, that fail in producing offspring of unusual merit. The same is seen in great cows; great daughters of great parentage, that are themselves marvels in milk-giving, yet never produce sons that are equal to their inherited greatness, nor daughters that are worthy to add fame to the family name.

This is one of the uncertainties of the business of the breeder; is always one of the things to be proved in the untied sire, and the strongest reason why the sire of proved worth should not be discarded until his successor's worth has been proved. This uncertainty is not enough, however, to discourage the new breeder, for I think it can very largely be overcome by a careful man by the unfailing exercise of good, careful mating and unceasing good feeding. Extra performance is a developed tendency or trait, and the power to transmit such artificial qualities must depend upon favorable conditions, and any neglect or relaxation of such conditions is bound to unfavorably affect the most artificial function of the animal first. Therefore we should remember when we allow the young and growing male—or female, either—to go hungry, stop developing, or in any way suffer in good thrift, we are possibly stultifying those fine qualities of prepotency that in the progenitors of our animal made their pedigrees famous. By a proper appreciation of even this single fact in the science of breeding the enthusiastic novice embarking in the business will realize that success means years of careful work.

A recent illustration of the power of a good inheritance reinforced by pronounced prepotency has come to my attention in the fine registered Jersey herd of Hon. W. C. Norton, of Pennsylvania. At the head of this herd is the imported bull Golden Romulus, with long lines of merit on both sides of his pedigree. Mr. Norton owns thirty female offspring of this bull, eight of which are now in milk with their first calves. On ordinary feed, and the latter part of their periods being through the severe winter weather of a two-thousand-foot elevation in the northern part of Pennsylvania, they have all milked over five thousand pounds of milk, averaging over five per cent butter-fat. This is not chance or accident. It is a demonstration of the worth of inheritance and the power to carry it along.

W. F. McSPARRAN.

### Mutton Chops

Lambs begin eating grain at eight to ten weeks old. They should then be given grain in a side pen not accessible to the mothers, and here the choicest locks of clover hay can be placed for them. The grains should be of a fine and palatable nature. Oats, ground wheat and oil-meal are suitable grains.

Perhaps no better nor cheaper mutton can be produced than on corn and clover hay and turnips. About two pounds of hay, and from one pound to two pounds of grain are about what a one-hundred-pound sheep will consume. Have fresh water always at hand.

If there are ticks, the sheep should be dipped after the shearing. Any good commercial dip may be used. A good home-made tobacco dip can be made by steeping twenty to twenty-four pounds



Live Stock and Dairy

of tobacco for twenty-four hours in sufficient water to cover. Boil for an hour before straining, after which allow to stand six to ten hours, and then dilute to one hundred gallons. Twenty pounds of sulphur will add to the effectiveness of the dip. A box should be provided deep enough to submerge the animal. Immerse the sheep for two or three minutes. With a large flock a dipping-tank, through which the sheep can be driven, saves the labor of lifting the sheep. This tank should be straight down at one

who is doing this work may or may not make a record of it. He may produce pedigreed animals, and not register them. Thus we have always had this difference in cows; and following the suggestive teaching of Nature, it is best and economical that we should foster and encourage these differences, and not try to nullify and abrogate them. There can be no doubt that for the food eaten the beef-animal will make beef more cheaply than will the dairy-animal, while the lat-



CHEVIOT RAM AND EWE

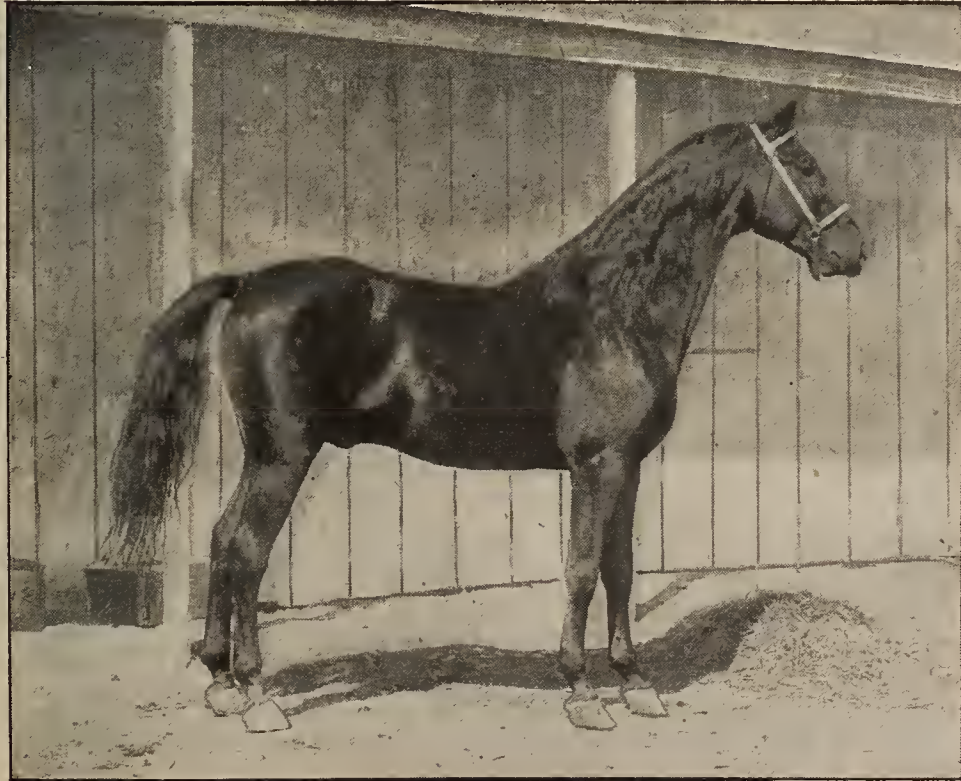
end, with a cleated incline at the other. It should be two feet wide at the top and one foot wide at the bottom. The sheep jump off the edge into the dip, and walk up the incline. They go on a draining-pan, where most of the dip drains back into the tank. They should not be put back in the pasture until they have stopped dripping, as the dip will soil the grass.—Farm Journal.

A Difference in Cows

All the good cows are not monopolized by one breed. The work of a cow is largely determined by tendency or temperament. Where one cow was inclined to convert her feed into milk, another made flesh over her frame; another did not give so much milk, but made it richer in fat. These were primary cows. They

ter, on the other hand, will make milk more cheaply than the other. Success is most marked in dairying and in breeding dairy-animals where these differences are recognized and made the basis of work. Where it does not pay to use the most specialized dairy-animals for dairying there will usually be found some local reasons making that region unfavorable for dairying; and by a parity of reasoning, I have never yet seen the section in which beef-making was considered a profitable line of agriculture that those feeders most qualified to express opinions have not agreed that the beef-bred animals are the most profitable for their uses.

It is equally true, and very suggestive as bearing on the subject of giving each cow her place and not trying to have



RÉX DENMARK, JR., CHAMPION GAITED SADDLE-STALLION

did these unlike things from the same kind of grazing. After the food was eaten and assimilated, the individuality, the temperament of the animal determined the character of the product—that is, from the same wild, unbalanced grasses or herbage these animals maintained their lives; the one made beef, the others made milk. This was tendency. Encouraging these tendencies, as manifested by the different animals, and fixing them into types has been breeding. Following the tendencies from one generation to another, and amplifying and intensifying them, is making pedigree. A man

her fill two opposing offices, that where we hear or know of pronounced successes in either dairying or beef-making, the work is always being done by dairy-animals, dairy-fed, for dairying, and beef-animals, beef-fed, for beef.

W. F. McSPARRAN.

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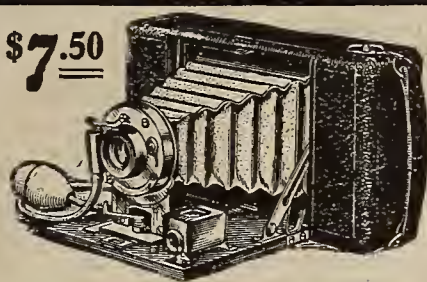
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## The Grange

By MRS. MARY E. LEE

### The Three Graces

**H**E MUST have been divinely inspired who conceived the idea of the three Graces—Ceres, Pomona and Flora—presiding at each meeting of the grange. The glamour of mythology that envelops them, the mystical observances with which the most cultured of all people encompassed them, lend them a dignity and charm seldom equaled and rarely surpassed. The worship of Ceres "under the name of the Eleusinian mysteries, in the splendor and solemnity of their observance surpassed all other religious celebrations among the Greeks." While this is befitting the goddess who presided over the fields and bid them yield or withhold their increase, the ceremonies attending the worship of Pomona and Flora, while less splendid, were none the less sincere.

To the highly poetic mind of the Greek each phenomenon of nature was symbolized by a deity or hero. To the more practical American the Graces typify plentifulness, beneficence, beauty. It is of the latter aspect I wish to speak. In passing, however, if there be any not averse to whiling away a pleasant hour in the happy realms of bygone days, let him read in any good mythological work the stories of these Graces. Read with sympathy, as befits the religious belief of a great and cultured people, to whom we are indebted for much that is best in literature, art and philosophy.

### CERES

From the planting of the seed until the gathering of the harvest, Ceres must ever be alert. It is her privilege to report from time to time the progress of the crops, what crop is being planted that month, and where, what reaped, the acreage planted, the weather conditions, insects and the probable amount of damage. Thus, by watching prosaic government and newspaper reports, she can estimate the probabilities of a large or small crop and the probable price thereon. She can also ask of the members if any disease is apparent. If there is, and she hasn't the bulletins at hand, she can write at once to the experiment station of her state, describing the disease, and ask for directions for treatment. Prompt measures of this kind will often save hundreds of dollars to the membership. She can also prepare, or through the lecturer ask members to write, papers giving the history of the development of the various plants, their habitat, and how they behave under various environments. Thus each meeting she can contribute pleasure and profit, and make of her office what it was intended to be, one of the principal ones in the grange.

### POMONA AND FLORA

The duties of Pomona and Flora are similar to those of Ceres, except that they have charge of fruit and flowers. A short talk of from three to five minutes at each meeting upon some phase of these subjects would certainly add interest to the meeting. Flora has a peculiarly pleasant office to fill, and one of much importance. No thoughtful person can see the ruthless destruction of our wild native plants without a quiver of shame and remorse. Popular sentiment should be educated, in order that our common plants may be retained. The clearing of our forests has destroyed some of the most dainty and fragile flowers known. The ruthless destruction of plants by those gathering the flowers is brutal in the extreme. Who has not seen a crowd swoop down on a bunch of flowers, or a tree, perchance, and not content with plucking a few blossoms, gather all they can carry, or until the careless enthusiasm of the moment has passed by, only to scatter them along the roadside later on? Not content with this destruction, the petals are torn away, the flower destroyed, showing that it was not so much the love of the flower itself as the habit of frittering away time with any object that attracts the eye. It might be well to get some cheap barn-paint, and decorate something for their amusement. Nature's paint-box is far too precious for such as they. Oh, it touches me to the quick to see the beautiful and fragile grace which the sun and rain, frost and snow have all contributed to make perfect, crushed and destroyed by those incapable of appreciating such beauty! One has no moral right to steal from you and me our property in the beautiful; and public sentiment should be so sensitive upon this point as to brand with shame one who takes what he cannot restore. Pomona and Flora, guardians of the beautiful, can do great service to humanity by stimulating a love for the native plants, and fostering

an enlightened public sentiment that will frown upon their careless destruction. If every Pomona and Flora in the land would rise to the dignity of their office, there would be such an increase of beauty as to make all glad. Engage any elderly person in conversation, and he will tell you of many departed beautiful flowers. It is fruitless to say that cultivated flowers take their places—they cannot, no matter how exquisite they are. They can no more fill the niche of the grace that is past than you can the place of another. Help those, Flora and Pomona, who have elevated you to your high place to preserve the beauty so fully and graciously given.

### The Abuse of the Right to Petition

The number of petitions that are presented to the individual indicates, among other things, the interest of the people in public measures, and their belief in the power of public sentiment. A petition may be either a very potent or a very weak weapon. The tendency to petition upon every conceivable subject, however, weakens the power. One should be as careful of his signature to a petition as of indorsing paper, but he is not, as a rule. Some well-meaning friend whom he does not like to offend asks for his signature. The measure seems "good," and the name is signed. Whether good or evil, the influence is cast. A case in point is the petition presented to the two parties asking that a plank favoring the "ultimate independence" of the Philippines be inserted in the platforms. This is in face of the public declaration of Ex-Governor Taft that such a promise would make trouble. Abstractly, it might seem that the Philippines should have the fullest form of self-government. Concretely it might be most unwise for them and others. No one who has not thoroughly examined the premises of the case has a right to an opinion that would warrant his expressing it in a petition. The opinions constructed from the past partisan press disputes are not opinions, but prejudices, and should be so regarded. In short, there are very few foreign topics upon which the average person has time and inclination to weigh carefully the evidence. And until he has weighed the evidence, he cannot act justly; and if he acts unjustly, it must be unwise. Be very chary of signing petitions until you can forecast with some intelligence their ultimate effect.

### Collect Samples of Seeds

Over eight hundred and fifty thousand pounds of Canadian blue-grass seed has been imported in the last six months, to mix with Kentucky blue-grass seed. As the Canadian seed is worth about one third as much as the Kentucky, the adulteration means many dollars to some one. The Canadian seed is often adulterated with Canadian thistle and other noxious weeds. To destroy the latter, the seeds are subjected to great steam heat. Steam is no respecter of seeds, and the grass-seed suffers with the rest. The trustful farmer sows his seed, and wonders at the light "catch." Other high-priced seeds are badly adulterated with cheap seeds resembling them. The adulteration can be detected only by an expert. It lies with the observant farmer to become fairly expert in classifying seeds. Let him collect samples from all seed-bearing plants in his community, put each in a bottle, and label correctly. If he is uncertain as to name, he should submit the plant which bore the seed to his experiment station, and thus learn the name. Of the plants that do not grow in his community, samples may be procured. Herein granges might be helpful to one another by exchanging seeds of different localities. Such a collection would be a valuable acquisition for a grange, and at practically little cost. Samples of the various grasses and clovers that are so often adulterated should be secured in absolute purity, and samples of seed submitted by dealers for purchase compared with the pure seed. It is far easier to be rid of noxious weeds by never introducing them than to fight them after being once established. It is useless to discuss the matter in its moral phase. We have the conditions to meet, and the best weapons for self-protection are intelligence and organization. Dealers will not adulterate their seeds when they find that the farmers are too well posted to be imposed upon.

### Free Trips

FARM AND FIRESIDE will send several of its readers to the St. Louis World's Fair, paying car-fare, hotel bills, admissions, etc., from the time they leave home until they return. See page 23.



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CLARK'S DBL. ACTION CUTAWAY Moves 18,000 Tons of Earth in a Day. HIGGANUM, CONN. U.S.A.

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## IT IS LOADED AGENTS "MEND-A-RIP"

Does all kinds of Light and Heavy Stitching. Does all kinds of light and heavy riving.

Will save the price of itself many times a year. A Perfect Hand Sewing Machine and Riveter combined. To Show It Means a Sale. Agents make from \$8 to \$15 a day. One agent made \$20 first day and writes to hurry more machines to him. Write for terms to agents.

J. F. Foote Foundry Co., Fredericktown, O.

## Dwiggins Climate-Proof

Fences are the standard for parks, lawns, cemeteries, etc. Double galvanized steel wire throughout offers perfect resistance to climatic changes. Distinctive designs—trim, graceful. Catalogue free, shows variety of styles 10c. to 50c. a foot.

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CHEAP AS WOOD We make all kinds of Lawn, Farm, Park and Cemetery Fence, AND SELL DIRECT TO YOU at manufacturers' prices. SAVE AGENTS COMMISSION by writing for our FREE CATALOGUE.

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**\$30 WEEKLY** Straight Salary and all expenses to man with rig to introduce our Poultry and Stock Remedies. Send for Contract. We mean business, and furnish best of references. Dept. D. ROYAL CO-OP. MFG. CO., Indianapolis, Ind.

best by Test—78 YEARS. We **PAY CASH** WANT MORE SALESMEN Weekly Stark Nursery, Louisiana, Mo.; Dansville, N. Y.



## The Sphinx No More a Mystery

SCIENTISTS of Washington confirm the reports which have been in circulation recently to the effect that the mystery surrounding the Sphinx has been solved. At the Smithsonian Institution it was said that the stone enigma of the desert is nothing more than a gigantic image of Ra-Harmachis, the god of morning and the conqueror of darkness, hence it faces the east. This discovery was made recently by means of the inscriptions on the walls of a temple which was unearthed by excavators.

Scholars uncovered the foundations of the great statue, and have brought to light many interesting features which until recently were unknown. The temple surrounding the base was intended for the worship of Harmachis, and several chambers hewn in the rock were the tombs of kings and priests devoted to his worship. In 1896 there was discovered a stone cap with a sacred asp carved on the forehead, which once covered the head of the Sphinx like a royal helmet, and must have added immensely to its grandeur, particularly if it was gilded, as it is believed it was.

The Sphinx is not an independent structure. The body and head are actually hewn out of the solid rock, but much sandstone masonry was built in to make the outlines perfect and to cover any defects in the material. This reinforcement of the original rock is now very apparent to a close observer, but originally they were concealed, for scientists believe that the entire image was once covered with enamel. Indeed, it is possible even now to find fragments still adhering to the surface which resemble porcelain tiles found in tombs and the ruins of the ancient palaces. Several private collectors and some museums have large blocks of most brilliant coloring and artistic design, and from them we can imagine what an imposing spectacle the great statue must have been before the Persians and the Mohammedans destroyed its glory.

While it is still an impressive picture, it has no beauty whatever. The nose, the lips and other features have been mutilated by vandals, among whom the French soldiers under Napoleon are said to have been the most vicious, but the defacement began before the Christian era, when Cambyes invaded Egypt and made it a province of the Persian empire.—Washington Times.

## Silk-Growing in the United States

The public interest in the revival of silk-growing in the United States continues unabated. Substantial progress has been made during the year just closed, and the prospects are good for increased output of silk cocoons this spring. Silk-growing associations are being formed in many states, and public schools are introducing the study into their systems. Among the latest-formed associations is the American Silk Growing Association of Vineland, N. J. The Silk Growers' Association of Patchogue, Long Island, has also been organized. A number of towns in Michigan grew silk in 1903. In California the industry is centered about San Diego, where there are quite a large number interested. In Georgia the Tallulah Falls Company is increasing its plant, and an industrial school to teach silk-growing and domestic arts has been planned there, and will soon be in operation. Steps are being taken to establish a school in western North Carolina similar to that at Tallulah Falls. Silk-culture in America has come to stay. When carried on as we have recommended—as a household industry to occupy the spare time of the women, children and aged or feeble members of the family—silk-growing cannot fail to fill an important place in our social economy. It will furnish useful and remunerative employment for labor otherwise unproductive. It will add to the comforts and happiness of the aged and young and the poorer classes of our population. It will make country life more bearable to the young of both sexes who now look even to life in the factory towns as a relief from the hardships of the farm.

But silk-reels and silk-weaving mills must necessarily follow the establishment of silk-farms, and the state which fosters silk-growing will in the end secure a bountiful reward in general prosperity. North Carolina can easily, and without detracting from any profitable industry already established, add to the wealth produced in the state not less than six million dollars annually. This is a sum worth striving for.—Gerald McCarthy, in Bulletin of the North Carolina Experiment Station.

## Wheat and Flour Exports

An increase of nearly two million dollars in the amount of flour exports for the year is the showing of the port of Puget Sound, and this despite the facts that flour exports from California actually declined and that the wheat product of this state fell off largely over the pre-

## Around the Fireside

ceding year. Where but a very few years ago the great bulk of the wheat raised in Washington was exported in the form of raw material, in the year just closed two thirds of it was exported as flour.

The large significance of these figures is not so much in the fact that our breadstuffs are now exported in the manufactured form as in the showing of new markets which have been created for them; and the significance of this is not merely local. We exported upward of six million five hundred thousand dollars' worth of flour during the year, as compared with three million seven hundred and thirty-three thousand nine hundred and five dollars in wheat; but while the bulk of the wheat exports went to the old market of Europe, our flour exports were almost entirely to the new markets of Asia and Oceania.

Owing to this fact, another very important change is seen in the wheat situation. Where once the buyers of wheat for export to Europe controlled the market and fixed the price for our wheat on the basis of Liverpool quotations and the charter rates for grain-ships, during the past season the local millers, buying to manufacture flour for Oriental account, were the great factor in the case. Until their needs were filled, the buyers for European account were out of the game, and they would have been out of it altogether had not the large oversupply of tonnage on the Pacific Coast, coupled with the low ocean-freight rates the world over, brought charters down to the point where the exporters were able to finally compete with the local millers.

The day often predicted is thus almost at hand when Asia will absorb all of the surplus breadstuffs of the Pacific Coast, and our export trade to Europe will be at an end. This will be to the advantage of wheat-farmers further East, for the Pacific Coast wheat crop is in a fair way to disappear entirely from the competitive market of Liverpool, and this will operate to bring about higher prices for all breadstuffs in that market.—Pacific Monthly.

## If You are Well-Bred

You will not measure your civility by people's bank-accounts.

In conversation you will not be argumentative or contradictory.

You will never make fun of the peculiarities or idiosyncrasies of others.

You will not forget engagements, promises, or obligations of any kind.

You will not sulk or feel neglected if others receive more attention than you do.

You will not have two sets of manners—one for "company" and one for home use.

You will never under any circumstances cause another pain if you can help it.

You will not believe that "good intentions" compensate for rude or gruff manners.

You will never remind a cripple of his deformity or probe the sore spots of a sensitive soul.

You will not remark, while a guest, that you do not like the food which has been served to you.

You will not gulp down your soup so audibly that you can be heard across the room, nor sop up the sauce in your plate with bits of bread.

You will not attract attention by either your loud talk or laughter, or show your egotism by trying to absorb conversation.—Orison Swett Marden, in Success.

## The Real Annie Laurie

Few stop to think when the heart is stirred by the old songs telling love's tale that in the majority of cases the heroine was a real woman, and not a creature of the imagination.

There was Annie Laurie, for instance, Scotland's favorite woman in song. She was the daughter of a Scottish knight, Sir Robert Laurie, and was born about the year 1682.

William Douglas, of Finland, one of the noted Scottish family of that name, loved the girl. When he left Scotland to fight in Flanders for fame and fortune she gave him a lock of her hair. In the lonely night-watches, when thinking of home and the maiden left behind, the soldier scribbled the song that became famous. It was the only remembrance the girl had of her lover. He was slain in battle. Tradition says he met death with the lock of Annie Laurie's hair in his hand.—Woman's World.

## A Spring Song

BY EVA ST. CLAIR CHAMPLIN

(Sung by a song-sparrow at my window in early morn.)

Sad heart, true heart,

Wake and sing!

Farewell, winter,

Welcome, spring!

Let thy sad thoughts.

Doubts and fears

Float away on

Winter's tears.

Sad heart, true heart,

Wake and smile!

I am singing

All the while.

Soon my mate will

Flutter near,

Coo and nestle,

Spring is herel

Leaves and flowers,

Nests a-swing,

Soul-filled joys

Will summer bring.

Sad heart, true heart,

Wake and sing!

Thy love, too, will

Come in spring.

True he is, though

Far away,

Silence cannot

Dim love's day.

In his heart your

Image burns,

Soon to you his

Step returns.

Sad heart, true heart,

Wake and sing

Till the banks and

Bushes ring

With the gladness

Of the spring.

## Hit and Miss

Russia's eye may be said to be Japanned.

The Chinese may learn the war is on by the time it is over.

The best way to make the acquaintance of the canal is to cut it.

Bet the czar wishes he had issued a proclamation of neutrality.

Russia has declared war, but we notice it is Japan that is making it.

Constant dropping day by day will take all the water in the stocks away.

Japan will strenuously exert herself to see that it is not "all quiet along the Yalu."

Now that the Panama incident is closed, the Panama canal should be opened.

Senator Carmack richly deserves being made to hold the vocal bag for Senator Morgan.

It is to King Peter's personal interest to encourage his "dear army" to follow Russia off.

Wonder if the Virginia negroes feel that John S. Wise is talking the worth of his "fee."

Viceroy Alexieff's cables to St. Petersburg are monotonously prefaced with "I regret to report."

Radium is said to be good for everything. It certainly furnishes excellent material for fairy-stories.

The poor old English cotton-mills haven't even a "presidential year" to charge all their hard times to.—Facts and Fiction.

## Items of Interest

Basket-making employs half a million persons in Germany.

The renovated White House has over thirty-two miles of wire.

The first issue of medals to British troops was in 1643 by Charles I.

Dog-lovers in Berlin have to pay a tax of five dollars a year on each of their pets.

In Cairo the proportion of blind people to the population is one to every twenty residents.

Theatrical stage employecs have sixty local unions and more than four thousand members.

The first life-insurance society was started in London in 1698, and another in 1700. Neither was successful.

Within three and one half years eighty-two trusts have been formed, having an aggregate capital of \$4,318,005,648.

The world uses five hundred million dollars' worth of cotton goods in a year. Of this Great Britain manufactures sixty-six per cent.

The Adirondack government reserve contains one million three hundred and fifty-five thousand eight hundred and fifty-one acres, and private parks aggregate seven hundred thousand acres. The Catskill reserve is eighty-two thousand three hundred and thirty acres.

It has been decided to establish wireless-telegraphy apparatus at all stations and on all passenger-trains on Italian railroads.

The first "blacklist of habitual drunkards" published in London under the new licensing act shows three times as many women as men.

A German mathematician estimates that the average man who lives to be seventy years old consumes ten thousand dollars' worth of food in his life.

The pugilist speaks of knockout blows over the solar plexus, but it is the stomach that receives the shock, and from it the nervous disturbance originates.

Artemiev, a Russian electrician, has invented a pliable coat of mail which effectively protects against currents of one hundred and fifty thousand volts.

There are about three hundred and fifty volcanoes on this earth that have performed in modern times. There are many hundreds more that have long been extinct.

The number of irrigating ditches and canals in operation in the United States exceeds twenty thousand, and their combined length is not less than fifty thousand miles.

It is claimed that the record for life-saving is held by Joseph Langlois, a Chicago policeman, thirty-seven years old, who has saved at least one hundred persons from drowning.

The value of the diamonds in the United States is estimated to be five hundred million dollars. Of this amount one hundred and seventy million dollars' worth are owned by residents of New York.

Malta is the most thickly populated island in the world. It has one thousand three hundred and sixty people to the square mile. Barbadoes has one thousand and fifty-four people to the square mile.—Woman's Magazine.

## Curious Facts

Vesuvius, the famous Italian volcano, is three thousand nine hundred and forty-eight feet high.

An innkeeper of Wilhelmsberg, who tips the scale at five hundred and two pounds, is the heaviest man in Germany.

There are now twenty-nine women of title in England who were American girls, including four duchesses and two countesses.

The chief desire of the municipality of Baro, in Chile, is to have their town known as a second London, and within the last decade much money has been spent to make it an exact replica of the British capital. The streets have been laid down and named after those in London.

It is not generally known that the jackal is a greater destroyer of humanity in India than the tiger. Statistics published by the government of India show that while nine hundred and twenty-eight persons were killed by tigers, more than one thousand children were carried away by jackals.

No other creature on earth can undergo such tremendous fatigue over long periods as man. In speed over short distances there are, of course, dozens of animals—such as the horse, dog and hare—with which man cannot compete, but in long-distance races man, well trained, can wear down the best of them.

The enamel of the teeth contains over ninety-five per cent calcareous matter. Straight hairs are nearly cylindrical; curly hairs are elliptical or flat. The weight of the average man is one hundred and forty pounds; of a woman, one hundred and fifteen pounds. The brain is supposed to contain over two hundred million cells, in which thought works out problems.

Although man is not well fitted by nature to be a swimmer, and is one of the few land creatures who cannot swim without being taught, yet in long-distance swimming he can give points to any other land animal. Montague Holbein in September, 1899, swam forty-six miles in twelve hours. Even in the matter of fasting there are few warm-blooded creatures who can cumulate such a performance as the forty days' fast of Tanner.

Man's memory is one of the most wonderful attributes. What is possible in this direction was proved a year or two ago at Naples, when a professor of rhetoric—Arlilli by name—repeated from memory fifteen thousand three hundred and fifty lines of Dante. He began to recite at eight o'clock in the evening, and went on until fifteen minutes after two the next afternoon, being at work for one thousand and ninety-five minutes, his rate being eight hundred and thirty lines an hour. He stopped for only a minute or two at long intervals, to sip a little brandy and water.—American Cultivator.

## Now is the Time

to send just that one new subscription of a neighbor friend to FARM AND FIRESIDE. It would help build up the list, and at the same time be doing your neighbor a favor. FARM AND FIRESIDE is only twenty-five cents a year.



## The Conscience of a Negro

SOME years ago, when visiting a little town in western Ohio, I found a colored man who made a profound impression upon me. The man's name was Matthews. When I saw him he was about sixty years of age. In early life he had been a slave in Virginia.

As a slave Matthews had learned the trade of a carpenter, and his master, seeing that his slave could earn more money for him by taking contracts in various parts of the county in which he lived, permitted him to go about to do so. Matthews, however, soon began to reason, and naturally reached the conclusion that if he could earn money for his master, he could earn it for himself.

So, in 1858, or about that time, he proposed to his master that he would pay fifteen hundred dollars for himself—a certain amount to be paid in cash, and the remainder in yearly instalments. Such a bargain as this was not uncommon in Virginia then. The master, having implicit confidence in the slave, permitted him, after this contract was made, to seek work wherever he could secure the most pay. The result was that Matthews secured a contract for the erection of a building in the state of Ohio.

While the colored man was at work in Ohio the Union armies were declared victorious, the Civil War ended, and freedom came to him, as it did to four million other slaves.

When he was declared a free man by Abraham Lincoln's proclamation Matthews still owed his former master according to his ante-bellum contract three hundred dollars. As Mr. Matthews told the story to me he said that he was perfectly well aware that by Lincoln's proclamation he was released from all legal obligations, and that in the eyes of nine tenths of the world he was released from all moral obligations, to pay his former master a single cent of the unpaid balance; but he said that he wanted to begin his life of freedom with a clear conscience. In order to do this he walked from his home in Ohio a distance of three hundred miles, much of the way over the mountains, and placed in his former master's hand every cent of the money that he had promised years before to pay him for his freedom.

Who will be brave enough to say that such a man is not fit to use the ballot, is not fit for citizenship?—From Booker T. Washington's "Heroes in Black Skins," in The Century.

## Nature and Science

**AN IRON MOUNTAIN.**—If it is not truly a mountain, it is at least a very respectable hill, situated near the International Railroad station at Durango, Mexico. It varies from four hundred to six hundred and fifty feet in height, is a mile long and about one third of a mile wide. United States Consul LeRoy, at Durango, speaks of it as a "solid mass of iron ore." Geologically it is described as a dike emerging from a rocky plain, which lies more than six thousand feet above sea-level. Its existence has been known for three hundred years. Humboldt heard of it, but did not see it, when he was in Mexico. It has not hitherto been exploited because of the difficulty of obtaining suitable fuel.

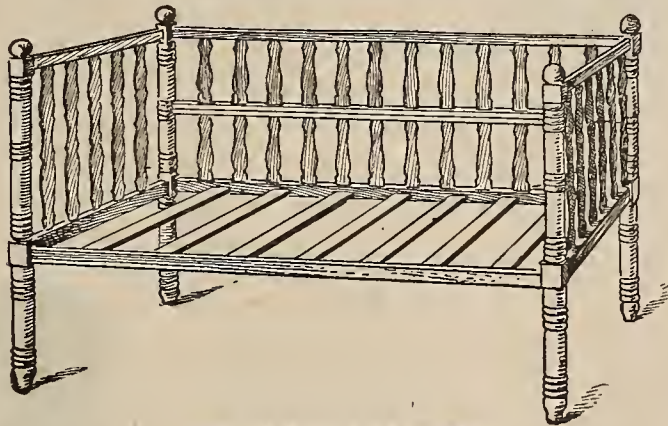
**THE DAIRY AS A TEMPLE.**—The people called the Todas, living in the Nilgiri Hills, India, have a very curious religious ritual evolved out of the ordinary operations of the dairy. The priest, says Dr. W. H. Rivers, is the dairyman, and the temple is the dairy. Only the milk of the sacred buffalo is churned in the dairy temple. The milk of buffaloes that are not "sacred" is churned in the front part of the huts in which the people live. The dairy temples are of different degrees of sanctity, corresponding to the different degrees of sanctity of the buffaloes tended in each. Even the vessels used in a dairy temple vary in sanctity, those that contain the milk being more sacred than those that receive only the products of the churning.

**ARTIFICIAL CAMPHOR.**—There is now in operation, on a commercial scale, at Port Chester, N. Y., an artificial-camphor factory, the product of which is intended to compete in the market with the natural substance. It is maintained that it does not differ, except in the manner of its origin, from that extracted from the camphor-trees of Formosa. Artificial camphor is made from essential oils derived from turpentine. Chemically the

## Around the Fireside

only difference between turpentine and camphor is the possession of each molecule of the latter of one atom of oxygen, which is lacking in the former. By a chemical process the needed oxygen is supplied. Three fourths of the whole supply of camphor is used in the arts, and one fourth in medicine.

**"WHITE COAL."**—In France the poetic name, "white coal" (la houille blanche), is applied to water-power employed for the production of electricity. France is poor in coal, but rich in waterfalls, and the utilization of them for industrial purposes is proceeding rapidly. In that part of France bordering on the Alps a recent computation shows the existence of sufficient water-power to furnish, during eight or nine months of the year, five million horse-power, and during the rest of the year three million horse-power. In the Pyrenees and elsewhere there are other great stores of water-power. The



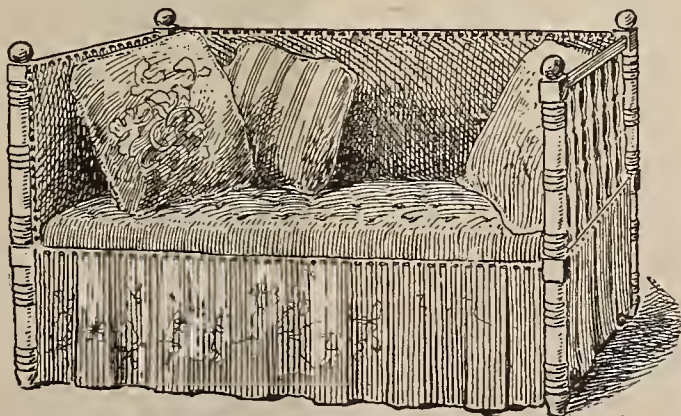
CRIB AS SHAPED FOR SEAT

aggregate consumption of steam in France two years ago was estimated at six million seven hundred and eighty thousand horse-power.

**MAGNETIC STORMS.**—The occurrence on October 31, 1903, of a great magnetic storm, which interfered with telegraphic lines more or less all over the northern hemisphere, coincidentally with the re-appearance of vast groups of spots upon the sun, has reawakened discussion as to the influence of sun-spots, or rather of the forces that produce sun-spots, upon the magnetism of the earth. The prevailing opinion among astronomers and physicists is that disturbances in the sun, recurring at intervals of about eleven years, do exercise, in some as yet undefined manner, an electromagnetic influence upon the earth, and that to this influence is due the appearance of brilliant displays of the aurora borealis and the occurrence of magnetic storms that affect telegraphic instruments and magnetic needles. But not every group of sun-spots is accompanied by these phenomena.—Youth's Companion.

## A Unique Cozy-Corner Seat

My baby had outgrown his crib, and a neat iron bed had been substituted. Then came the question, What shall be done with the crib? Part with it? No, indeed! It had become endeared to me, and as there was no attic in which to



SEAT WHEN FINISHED

store it, it was necessary to utilize it in some manner in our living-rooms.

The crib was of the ordinary variety, with high ends and low sides, the foot side being hinged on. It had long been enameled white, but to make it look less like a crib, a can of forest-green enamel paint was bought, and a thin coat—so thin that the white almost showed through—was applied.

The hinged side was removed and firmly fastened to the back, making that the height of the ends. The legs were then sawed off, to make it a convenient distance from the floor to use as a seat.

A quantity of hair—an old hair mattress, in fact—made a box cushion for it,

looking exceedingly well covered with a green burlap having a large, sprawling pink rose upon it. With a long darning-needle and some pink floss the cushion was tacked in squares, the ends

being tied tightly before cutting.

Next was made a very thick pad the width of the sides and ends of the crib, and just long enough to upholster them neatly. This was also covered with the green burlap, tacked firmly to the top and bottom, and finished with upholsterers' braid, put on with gilt-headed tacks.

A box-plated valance of the burlap all around the crib, finished also with braid, completed the seat.

The whole cost of my cozy seat was about two dollars and fifty cents, but of course it was my own handiwork.

Upholstered as it is now, and set in a niche by the chimney, piled high with bright-colored cushions, it is the admiration of all my callers, who are surprised when told of its humble origin.—Lenora F. Channon, in the Ladies' World.

## Propagation of the Reindeer

Reports have been received by the government agent for education in Alaska,

Dr. Sheldon Jackson, from all but one of the stations for the propagation of domestic reindeer in that territory. Point Barrow is the only place to hear from, and a considerable herd is stationed there. The reports show that ten thousand six hundred reindeer fawns were born at the various stations during the last season, the number at Point Barrow being estimated at one hundred and seventy-seven. On June 30th, according to the returns, the domestic

reindeer in Alaska aggregated six thousand one hundred and thirty. This is regarded as a fine showing, and the feeling of the domestic department officials is that the experiment of introducing domestic reindeer into Alaska, chiefly for the benefit of the natives, has been fully vindicated. No reindeer were brought from Siberia this year.

The government made a contract last winter with the Northwestern Commercial Company to bring over a large number of deer, but the representatives of the company found that the government of Russia had decided not to allow any more deer to be exported from Siberia at present. The Russian authorities said that they feared the natives of Siberia would be deprived of their means of subsistence. Doctor Jackson says that this shows how much the Russian government thinks of domestic reindeer as a staple resource of the native inhabitants. The largest herd of reindeer in Alaska is now at Cape Prince of Wales, at the entrance from Bering Sea to the Arctic Ocean. There are one thousand five hundred and twenty-five deer at Point Barrow, in charge of Eskimo herders. The next largest herd is at Unalaklik, where there are one thousand three hundred and twenty-four deer.—Christian Work.

## An Every-Day Creed

I believe in the efficacy of soap. I believe that work is the best panacea for most ills, especially those of the mind, and that fresh air, exercise and sleep are the best medicines for the body.

I believe in fun and laughter, both as a tonic for the blues and as an outlet for high spirits.

I believe in the beauty of flowers, sunsets and mountains; in the music of birds and brooks.

I believe that there is a bright side to everything, and that we would be more aware of the good about us were our hearts more responsive to its touch.

I believe in human kindness.

I believe that an ounce of frankness and explanation is worth a pound of repentance and forgiveness, and will often prevent heartache and bitter misunderstanding.

I believe in the simple life of the home, free from formality and social conventionality.

I believe in the hearty handshake, in hospitality, comradeship, friendship, love.—E. Stocking.

## Full Value

FARM AND FIRESIDE is really giving more for the subscription price than any other home and family paper published. One year, twenty-four big numbers, only twenty-five cents—about one cent a copy. Where can you invest twenty-five cents that will pay you better? Get your neighbors to become members of the big FARM AND FIRESIDE family.

## Everybody's Corner

Be a good neighbor.

Reproof is the sign of a friend.

Keep a strict account of expenses.

No person has more religion in him than comes out of him.

Begging and borrowing do not pay so well as working, and are so much harder to do.

Get up a club of subscribers to FARM AND FIRESIDE from among your neighbors, and help the old farm and family favorite along.

Farming without system, living without an ideal, working without a purpose, being careless with little things about the farm, is a sure road to want and poverty.

Read plenty of good agricultural papers, study the best methods of farming, arrange all work systematically before you begin it, profit by your past mistakes, do things right or not at all, save the dimes.

We are going to send several FARM AND FIRESIDE readers to the St. Louis World's Fair, and pay all expenses—no matter where they live in the United States—from the time they leave home until they return. Write and inquire.

A man must be miserably poor if he cannot afford to give his neighbor a kind word.

If the light of our life shines brightly our neighbor will be benefited.

Brown paper moistened in vinegar will polish your tins until they shine like silver.

A pitchfork is a dangerous thing to let lie around in a careless way.

FARM AND FIRESIDE is making an effort to secure many thousands of new subscribers, and its readers are responding nicely with their help. A good friend sent us a club of twenty subscribers, with a letter saying many nice things about FARM AND FIRESIDE, and wishing it continued success. Now, neighbor, what can you do to help swell the list? Let us hear from you.

The next time you are at the hardware-store lay in a stock of burrs of different sizes, and string them on a wire for safe keeping. You will find use for a lot of them when you go to put the farm-machinery in working order.

There's money in poultry when properly conducted. Better get "The Complete Poultry Book." It contains it all. We will send FARM AND FIRESIDE one year and the book for only forty cents.

If we all understood better about feeding the horse, he would have fewer sick spells. A goodly share of his ills result from careless feeding and watering. "Gleason's Horse Book," and FARM AND FIRESIDE one year, for forty cents.

Carelessness about the farm is the forerunner of mortgages and failures.

Don't forget the house and lawn. Start the flower-beds, set out the new rose-bushes, and fix up the gravel walks. It will add to the value of your property.

Benjamin Franklin said, "Plow deep while sluggards sleep, and you will have corn to sell and to keep."

When you renew your subscription to FARM AND FIRESIDE, get your neighbor to subscribe, and send it along with your own. Always strive to do your neighbor a good turn. If he is a bad neighbor, he may get ashamed and do better. Nothing pays as well as to do good.

God bless the farmer who sows the wheat (Nature furnishes milk and fruit and meat); Let his purse be heavy, and his heart be light, His cattle, his corn and all go right, God bless the seeds his hands let fall, For verily the farmer feeds them all.

Help FARM AND FIRESIDE get many thousands of new subscriptions. You can do it. Get a few of your neighbors to subscribe.



## Paper Articles

THE charm of pretty, neatly made articles of paper is not yet a thing of the past, as these useful as well as decorative articles testify. Select a color in decorated paper napkins—yes, ordinary, but not commonplace, napkins—for a certain style and character is necessary if one would expect to secure satisfactory results, a border all around being most effective.

**DRESSER-SCARF.**—The dresser-scarf requires fifteen napkins—six for the body part, and nine for the fringe, which is folded and cut, the seams and joining of the fringe to the scarf being concealed by working a brier-stitch with floss of the same color as that which predominates in the napkins.



SPOOL-CASE

**HANDKERCHIEF AND GLOVE CASES.**—The handkerchief and glove cases require but two napkins for each, with a layer of white cotton batting well powdered with sachet-powder between. Buttonhole with floss of the same color, and finish with bows of ribbon in the same color.

HEISTER ELLIOTT.

**STAND-COVER.**—Cheaper than washing, less trouble than linen, cost trifling, and very neat and beautiful, are the different home decorations made from the little paper napkins. Among them are the dresser and wash-stand sets, mantel-lambrequins and stand-covers. For the stand-cover illustrated one and one half dozen paper napkins and one spool of san silk are required. The napkins can be purchased at any notion-store for five cents a dozen, the san silk costs but five cents, thus making an inexpensive article.



TEAPOT-HOLDER

Take eight napkins for the center of the cover—four each for the top and bottom—lap the edges about one inch, and catstitch the eight together with the san silk; eight are then folded in the center, put on with an inch lap, all four sides being filled; two are cut in halves, and fixed in the corners; both sides are finished with the catstitch. The outer napkins are cut in fringe five inches deep. In this way both sides can be used, the dust can easily be brushed off, and one would be surprised at the durability of so dainty an article.

O. M.

## Teapot-Holder

This useful little article is knit of yellow German-town yarn, with green silk floss for the end, in exact imitation of an ear of corn. On quite coarse steel needles cast forty-five stitches, and work with two threads as follows:

First row—Knit five with one thread, take the other thread, and draw it tightly across the back of the knitted stitches to produce a curved effect, like a kernel of corn. Knit the next five stitches with the second thread, and draw them up with the first thread. Use these two threads alternately in this way across the row.

Second row—Knit back, taking first the thread which was used in making the next to the last kernel. Knit as in preceding row, except that you must keep the threads on the wrong side of the work, which in this row is next to you. The secret of success is in the drawing of the threads to form the kernels—they must be tightly drawn, and must not be allowed to slip.

Knit back and forth in this manner until the holder is twenty-five kernels deep, then instead of casting off, take a yarn-needle, and draw the knitting-threads through the stitches, tying them tightly. Draw the other end together to correspond in shape. Add a tassel of green silk at one end, and at the other a small bow of ribbon of the same shade of green.

HEISTER ELLIOTT.

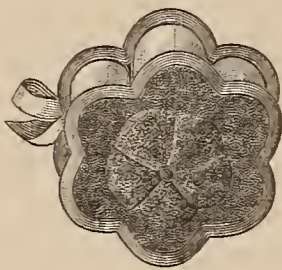
## Spool-Cases

For the long case, cut from bronze leather one piece the shape of the diagram, line with brown or colored silk, neatly bind the scallops with brown binding-ribbon of the same shade, punch holes in each scallop, lace back and forth through eyelets and spools with satin ribbon of the same shade of brown, and tie in a small bow at the end.

The round case requires two pieces the shape of the diagram cut from the leather, lined and bound with brown ribbon, the spools being held in place by lacing with ribbon, like the other. A small velvet cushion in the shape of a tomato is stitched to the top.

Both cases are improved if a cardboard form smaller than the leather is inserted between the lining and outside.

HEISTER ELLIOTT.



SPOOL-CASE

There should be an even number of the clusters of three long picots.

The second row is the same as the first, joining each time to the three long picots. In the third row use the shuttle only. A ring of 4 doubles, join to cluster of three long picots, 4 doubles, close. Leave a short length of thread, 2 doubles, long picot, then alternately 1 double, long picot, until there are 7 picots, 2 doubles, close. Leave thread, \* another small ring joined to next cluster, leave thread; repeat once more from \*, leave thread, and repeat from picot ring.

JULIA A. WILLIAMS.

## Do You Know

That ruching is newer, and as a rule more becoming to the average woman, than turnovers?

That for your "dressy" gown the sleeve-ruffles are from four to eight inches wide, made from batiste or fine lawn edged with lace and finely plaited?

That from two to four combs are worn in the hair at one time—in the back and at the sides? I have seen three, one above another, and the effect was stunning.

That "lingerie," or "baby," hats are the fashionable thing for the summer girl of 1904? These hats are made of numerous ruffles of lace-edged lawn or finely plaited lace trimmed with a long looped bow of velvet or soft taffeta ribbon.

That the old-fashioned French twist is again worn, with a long comb placed perpendicularly at the side?

That you must have a girdle to wear with your summer gowns? Even the leather belts are now wide and soft, and crush into a becoming fullness when fastened around the waist.

That the newest veils are dotted with chenille? Large and heavy dots form a border, the dots growing smaller over the face-portion. The veil is then draped to fall loosely around the hat.

That the deft-fingered girl can make herself a dainty kid girdle out of her old long-wristed gloves? She will, of course, clean them, stitch the two wrists together, and proceed much as she would for a stock, using featherbone for back, sides and in front, using any pretty buckle that she may happen

to have on hand, or making one from heavy cardboard covered with the scraps of kid.

That "the" shirt-waist for traveling, business and practical purposes has again returned to simple lines, leaving the elaborate ones for afternoon wear with fancy skirts? The madras, linen and vesting ones are made with a moderately large sleeve, cuff broader than last year and close fitting, shoulders long, fronts made with wide tucks stitched again on their edges. These are for wear with the short skirt.

That very few long skirts will be seen this year unless for calling, they being reserved for the house,

as they should be? A skirt which measures from five to eight yards around the bottom and lies three inches on the floor at front and sides is rather a difficult proposition to hold up gracefully.

That tan shoes are again "all the rage," in colors shading from "pongee" to a dark brown? They come with both the high French heel and the Cuban, but even the Cuban is higher than formerly.

That very few separate silk waists are seen? They belong apparently strictly to the silk shirt-waist suit. Not but that odd waists are as popular as ever, but they are made of softer materials, such as chiffon, crêpe de Paris and crêpe de chine.

There is literally no end to the fine tucks—hand-run—and shirring is more popular than ever. Here is a chance for the girl with nimble fingers, as the most expensive waists are those made by hand. Don't forget that a little handwork adds dollars in value to an otherwise simple waist. A few French knots, fagoting, catstitching and dainty insets of lace medallions require only patience and daintiness of touch.

That the loose coats of taffeta and pongee still hold their place? They are plain and plaited, with capes and deep yokes. Taffeta coats to match suits or not are trimmed in bands of cloth as a rule.

That accordion-plaiting has a new lease on life, especially for evening gowns?

That hats for little girls this spring and summer will have very little trimming aside from the exquisite



HANDKERCHIEF-CASE



DOILY No. 1

wreaths of flowers that are made in such variety and profusion? Bows of velvet or Liberty satin ribbon will be used with flowers or alone.

That the outside coats worn by little girls this year are very attractive, being made on the same lines as the "grown-ups"? The loose sacque coats are especially becoming, and a blue coat is always a safe investment.

That the sailor-suits for boys are still very much in vogue, made on the same lines as they always have been? There is really no novelty for boys.



DOILY No. 2

That the new ribbons are first tied in a four-in-hand, then into a bow with two loops and ends or one loop and two ends?

CAROLINE CRAWFORD.

## Think It Over

Have you ever really thought about the matter in this way? If each reader of FARM AND FIRESIDE would send just one new subscription in addition to his own, that FARM AND FIRESIDE would have the greatest circulation of any farm paper in the world? Now, it is easy for you to do this much. Please help. FARM AND FIRESIDE is only twenty-five cents a year.



## Arrangement of Flowers for the Table

IN JAPAN the arrangement of flowers is a science as well as an art. There they are taught the relation of one flower to another and the relation of the vase to the flowers. To them it is of much importance whether the vase is high or low, slender or massive; whether it is glass or porcelain, clay or bamboo. When we see the result of their skillful and artistic work in the graceful arrangement of flowers, we feel that we need to profit by their esthetic rules.

Most flowers look best when kept by themselves, and in arranging flowers it is a good rule to keep each kind of flower by itself. It is well to take a lesson from nature—it will teach us how to place the flowers in the vase or bowl and how much foliage to use, and it will certainly teach us not to arrange them in a heterogeneous mass lacking both harmony and gracefulness.

For early spring decoration nothing is more attractive than the dainty lilies-of-the-valley. They are especially effective placed in a clear glass vase, the green stalks seen through the water looking cool and restful. Silver vases are also nice for these sweet blossoms. All small flowers that grow in clusters, such as lilies-of-the-valley, violets and forget-me-nots, can be very effectively arranged in moss in low dishes, as if growing.

Another pretty flower for spring decoration is the dicentra, or "bleeding heart," by which name it is perhaps best known. Its pretty heart-shaped flowers of pink and white are very attractive arranged in rose-bowls with some of its fernlike foliage mixed in.

In June—the month of roses—there is a wealth of bloom from which to choose. What grand bouquets roses make! Don't crowd them, but let each rose speak for itself in all its royal loveliness. Use enough foliage to act as a contrast to the brilliant scarlet and crimson, and a beautiful background to the white and yellow. Roses usually show off to the best advantage arranged in bowls or globes, but if you have a few choice specimens, put them in a tall, slender vase. Pink roses look well in clear or cut glass bowls, yellow in brown or dark blue ones, and white roses with green foliage are most effective in a pink or red bowl.

What is more charming for bouquets than the blossoms of the sweet-pea? Cut them with long stems of different lengths, and arrange loosely in a slender vase with a wide mouth, or a rose-bowl. If crowded in a mass, their beauty is marred. Arrange some so that they will droop gracefully over the side of the vessel.

Nasturtiums are always suitable for decoration. Choose the scarlet and rich maroons. Use plenty of their own foliage, and arrange as naturally as possible in bowls.

If you wish a striking and brilliant bouquet, cut off two or three branches of the scarlet salvia, and arrange in a tall vase. A dark green vase is especially appropriate.

Wild flowers lend themselves nicely to table-decoration. The dainty bluebells are nice arranged in white or yellow vases, golden-rod can be effectively arranged in a brown or deep blue vase, and ferns are very pretty in deep red vases or bowls. Impromptu baskets and holders can be made out of birch-bark, and are especially nice for wild flowers. Water-lilies are charming laid loosely in a little birch-bark canoe.

PANSY VIOLA VINER.

## Croquettes

MEAT CROQUETTES.—Chop fine one cupful of either chicken, veal or lamb with a little celery and parsley. Melt one tablespoonful of butter, add half a tablespoonful of flour, and cook until smooth, then add gradually one cupful of stock or cream, one half teaspoonful of salt, a little lemon-juice and a dash of pepper. When thoroughly cooked add the chopped meat, and remove from the fire. When cold, shape in small rolls, dip in fine bread-crumbs, then into beaten egg and again into the crumbs, and place on a plate to dry. Fry in very hot, deep fat until brown.

POTATO CROQUETTES.—Take two cupfuls of hot potatoes rubbed through a colander, two tablespoonfuls of butter, the yolks of two eggs, one half teaspoonful of salt and a dash of pepper. Mix thoroughly, and shape in rolls. Roll in fine bread-crumbs and beaten egg, and fry in deep fat.

RICE CROQUETTES.—To one half cupful of boiling water add one half cupful of washed rice and one half teaspoonful of salt. Cook until the water is absorbed, then add one cupful of scalded milk. Stir with a fork. Cover, and steam until the rice is very soft. Remove from the fire, add the yolks of two eggs and a small piece of butter, and allow it to cool before shaping into rolls or balls. Roll in bread-crumbs and beaten egg, and fry in deep fat.

MARIE WILKINSON.

## How to Bone a Bird

In buying birds for boning, select those which have been fresh killed, dry picked, and not drawn. Singe, remove the pin-feathers, head and feet, and cut off the wings close to the body. Lay the bird on a board, breast down.

Begin at the neck, and with a sharp knife cut through the skin the entire length of the body. Scrape

## The Housewife

the flesh from the backbone until the end of one shoulder-blade is found; scrape the flesh from the shoulder-blade, and continue around the wing-joint, cutting through the tendinous portions which are encountered; then bone the other side. Scrape the skin from the backbone the entire length of the body, working across the ribs. Free the wishbone and collar-bones, at the same time removing the crop and windpipe; continue down the breast-bone, particular care being taken not to break the skin, as it lies very near the bone, or to cut the delicate membranes which inclose the entrails. Scrape the flesh from the second joints and drumsticks, laying it back and drawing off as a glove may be drawn from the hand. Withdraw the carcass, and put the flesh back in its original shape.—From Fannie Merritt Farmer's "Food and Cookery for the Sick and Convalescent."

## Holland Salad

Cut into cubes an equal quantity of pickled beets, potatoes, dill pickles and raw tomatoes; rub the yolks of four hard-boiled eggs through a sieve into a bowl, then mix carefully and gradually to a cream with oil and vinegar, season with salt and pepper and a tablespoonful of anchovies (or a small onion); add to the vegetables, and toss lightly until thoroughly mixed. Garnish with crisp lettuce and sliced hard-boiled eggs.

M. H.

## Sweet Violets

I have had such a mixed experience with this little patch of violets. I really feel I do not deserve the pleasure I derive from the fragrant blossoms. Two or three years ago a friend, thinking to do me a great favor, gave me a root potted in a pint cup. I placed it with my collection of potted plants, out of doors in summer, and in any vacant corner in winter, regardless of lack of sunshine, dust or other unfitness of location, watering them when I had time or happened to think of it. The plants that escaped the "drought" were taken by the freeze-out, and in the springtime the "survival of the fittest" was not that cup of violets, at least in appearance. There might have been life in the root, but I emptied it out, never thinking it was a hardy plant, and with scarcely a regret, except for the giver, as the two or three blossoms it had unfolded in spite of my neglect were smaller than a medium-sized housefly. I counted the fragrance dear at that rate. Then another friend, grateful for imaginary favors, presented me with a pot of violets, which I put in the ground at once, as they were said to be hardy, and felt relieved. Too much honor was being thrust upon me. Later I gathered half a dozen blossoms, small and sweet, once or twice a week, perhaps—just a "smell" for the daughters near by to decorate or perfume with—and when winter set in I put a bit of carpet over them, and left them to their fate. In the spring the cutworms seemed determined to gather them in. In return I gathered cutworms by dozens, and gave away violet-roots to whoever coveted them, until this patch was reduced to the size of a large dinner-plate, and turned my attention to other plants more satisfying to my mind. Then how like magic they grew and spread and blossomed! Deep digging for cutworms—cultivation—was all they asked; neglect and rough treatment were lost sight of. Blossoms large, sweet and abundant—I somehow felt conscience-stricken. They were "heaping coals of fire"—suggesting to me the Golden Rule, "What measure ye mete," and all such scripture lessons or condemnation. I felt they were too precious for common decoration, and many were the clusters sent to the house of mourning. Their mission from that time has been to comfort the sorrowing, to cheer the sick, to gladden the aged, though not forgetting the debutante, the graduate and the bride. Their fragrance is symbolic of purity. Youth has its May-day, the veteran has his Decoration Day, the W. C. T. U. has its June Flower Mission Day—all of these I observe, but now I have added to these a special flower-mission season—namely, "When the violets are blooming."

VESTA C. TURNER.

## Spoon-Case

This convenient spoon-case is made of white fleece-lined Oxford. Take two pieces of cloth twenty-one inches long and eleven inches wide, fold over eight inches, and sew up on both sides; then cut the other end in a point, which forms a lap, and embroider in scallops. Run five rows of catstitching on the double part, thus forming six casings. Tie the bags together with ribbon. Use floss and ribbon of the same shade.

M. H.

## Pin-Balls

The pretty little balls from the stately sycamore-tree can be put to practical use in the form of a receptacle for pins on the office-desk, as well as my lady's dresser—indeed, anywhere that pins may be required, this little article can fill a want.

With a medium-sized steel needle crochet a circle three or four rows deep of any shade of silk, then hold this around the ball, and narrow row after row until it is incased in a coat of silk. Close the end tight, fasten the end of silk. Suspend three or four balls by means of irregular ribbons from a bow of the same ribbon,

hang by the bow in the place desired, and stick the balls full of pins, when they will much resemble the skin of the fretful porcupine.

HEISTER ELLIOTT.

## Handkerchief Kimono

Six handkerchiefs are used in the construction of this style of dressing-sacque—two for the fronts, two for the sleeves, one for the back and one for the yoke. Some planning is necessary in order that the collar and ties may be made of the border. It will be noticed in the illustration that a corner and top border of the fronts is cut away to shape the arm-hole and prevent a double border where the yoke joins the skirt. This forms the two points for the collar by joining the border in the back. The stripe from the top of the handkerchief for the back is sufficient for the ties. A little fullness to the front of the shoulder in the sleeve is necessary to give ease in the movements of the arm when worn.

HEISTER ELLIOTT.

## Home-Made Rugs

Pretty bedroom rugs can be made after the manner of the old-fashioned rag carpets. Use cotton rags of one color, and have them woven with a different colored warp. With white rags use the red or blue warp, and with the colored rags use the white warp. Rags can be dyed the desired color very satisfactorily. Tear the rags about

three fourths of an inch wide, and join them by folding together and sewing them very smoothly. This will avoid any rough or uneven places in the rug.

MARIE WILKINSON.

## Bodkin-Holder

Satin ribbon No. 2 width overcast together, stuffed with a roll of cotton, tied at each end and fringed, with catstitching worked as shown in the illustration, makes a useful article for the work-box when different sizes of the steel articles are inserted in the catstitching for a casing.

HEISTER ELLIOTT.

## Keeping Silver Clean

Make a pad of sheet wadding covered with cheese-cloth for every compartment of your sideboard where you keep any silver, and put a little camphor between the pad and covering. This will prove a great preventive against tarnishing. Pads of this kind in the drawer where the small silver is kept are pretty sure to keep it in a condition ready for use, no matter how long a time may have elapsed since it was put away.

INEZ REDDING.

## Cleaning Straw Hats

Stains and mildew can be removed from a straw hat by using a weak solution of oxalic acid. Lay the hat on a flat surface, and clean it with a brush or cloth. An old hat can be whitened by holding it closely over burning sulphur.

M. W.

## Filling a Rose-Jar

Dry the rose-petals thoroughly before putting them into the jar, to prevent molding. Place them in the jar gradually, sprinkling them with salt, adding a few whole spices—cloves, cinnamon, mace and allspice. Keep the jar covered closely.

M. W.

## Stale Cake

Take one teacupful of stale broken cake, and soak it in one teacupful of sweet milk. Pare and slice three fresh peaches, or any other fruit you have on hand, and



SPOON-CASE

put in a buttered baking-dish alternate layers of the fruit and the soaked crumbs. The layers of fruit should be sprinkled with sugar. Sprinkle sugar over the top, put on a few "dabs" of butter, and bake in a moderate oven. Serve either cold or warm with sweetened cream or a simple sauce.

MAY MYRTLE FRENCH.

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## The Young People

### Two Fast Friends

FLOSS was a very pretty cat, and had soft gray fur, nice blue eyes and a fine fluffy tail. Miss Floss knew she was not a common cat, and gave herself airs accordingly, for her mistress made such a pet of her that she quite spoiled her. But a day came when Miss Floss had a rival, and this was the sweetest little toy terrier in the world, with pure white fur like silk, and her dainty little neck ornamented with a smart blue satin bow.

"There, Floss," said her mistress, as she put down her new pet on the hearth-

for her little rival, and they became the best of friends. She was not even very jealous when her mistress made a great fuss over Fanette. And this was saying a great deal, for Floss was a very affectionate pussy.—Fashions.

### How Cowslip Saved Him

In the Highlands of Scotland it is a kindly custom to give names to the cows as well as other animals. A Scotch lad had three to care for, and all three had names. The red cow was Cowslip, the dun was Bell, and the black was Meadow Sweet.

The cows knew their names like three children, and would come when called.

"One day," the boy tells us, "I was not with them, but had been given a holiday, and had gone up on the side of the hill. I climbed until I was so high that I got dazed and lost my footing upon the rocks and came tumbling down, and snapped my ankle, so I could not move.

"I was very lonesome there. It seemed to me that it was hours that I lay there, hitching along among the bracken. I thought how night would come, and nobody would know where I was. I could not move for the anguish of my foot. It was of no use to call, for there was naught in sight save the crows skirting against the sky. My heart was fit to break, for I was but a lad, and mother looked to me for bread. I thought I would never see home again.

"After a while I spied a cow beneath, grazing on a slip of turf just between a rift in the hills. She was a good, long way down, but I knew her. It was Cowslip. I shouted as loud as I could, 'Cowslip! Cowslip!' When she heard her name she stopped grazing and listened.

"I called again and again. What did she do? She just came toiling up and up, till she reached me. Those hill cattle are rare climbers.

"She made a great ado over me, licked me with her rough, warm tongue, and was pleased and as pitiful as though I were her own. Then, like a Christian, she set up a moan, and moaned so loud and so long that they heard her in the vale below.

"To hear a cow moaning like that they knew meant that she was in trouble, so they came searching and seeking. They could see her red-and-white body, though they could not see me. So they found me, and it was Cowslip that saved my life."—Presbyterian.

### A Story of Mr. Gladstone

About twenty years ago a shoemaker came to London and established a small workshop, but in spite of industry and strict attention to business he continued so poor that he had not even enough to buy leather for work which had been ordered. One day he was in the whispering-gallery of St. Paul's Cathedral with his betrothed wife, to whom he confided the sad condition of his affairs and the impossibility of their marriage.

The young girl gave him all her small savings, with which he went next day to purchase the required leather, without, however, knowing that he was followed by a gentleman commissioned to make inquiries about him. The shoemaker was not a little surprised when the leather merchant told him that he was willing to open a small account with him. In this way did fortune begin to smile upon him, and soon, to his great astonishment, he received orders from the wealthiest circle in London society, and his business became so well established that he was able to marry and have a comfortable home of his own. He was known in London for years as the "Parliament Shoemaker," but only when, to please his German wife, he left London for Berlin, did the leather merchant tell him that he owed his "credit account" to none other than Mr. Gladstone. The cabinet minister had been in the whispering-gallery when the poor shoemaker was telling his betrothed wife of his poverty, and owing to the peculiar acoustics of the gallery, had heard every word that had been said.—British Weekly.

### The Key to Success

A careful study of a business is oftentimes the key to success. To be successful, the farmer should avail himself of every opportunity to read and study up on the practical points of farming, and then put them into practice. Where is the best place to find these practical helps? Right in the columns of FARM AND FIRESIDE. It's all practical, every word of it. Twenty-five cents a year.



FANETTE

rug. "There's a nice little playmate for you. This is Fanette."

"How do you do?" said Fanette, quite politely, as Floss followed her mistress out of the room with her eyes without looking once at her new acquaintance. "You've got a very pretty home here."

"Humph! I dare say you'll do your best to spoil it," sneered Floss, who was jealous. "What have you come here for?"

"Because my mistress loves me."

"She doesn't," said Floss, tossing her head indignantly. "She loves me. Why, what good are you? I don't suppose you can even catch mice."

"I've never seen one yet," said Fanette.

"Gracious, what a baby!" said Floss. "Pray, where have you lived all your life?"

"I haven't lived very long," said little Fanette. "I am only six months old."

"Dear me," said Floss. "What is my mistress thinking about? Well, come along—I suppose I must show you around the place. This is a special nook, and



FLOSS

you mustn't come here unless you're invited; but I'll take you down to see the pantry." With this she was condescending enough to show Fanette her new home, and the little dog was quite delighted; but when they marched out into the yard Floss lost her dignity, and was nearly frightened out of her wits by a great strange mastiff, who rushed up and barked at them loudly. She arched her back and got into a terrible state of nerves.

But little Fanette was by no means frightened, and running up to the big dog, she yapped at him in such a courageous way that the mastiff was quite ashamed of himself and slunk away.

"Well, you've got some stuff in you, after all," said Floss, "if you are small."

And after this she had quite a respect



## Sunday Reading

### If We Would

BY EDITH MILLER

If we would but check the speaker  
When he spoils his neighbor's fame;  
If we would but help the erring  
Ere we utter words of blame;  
If we would, how many might we  
Turn from paths of sin and shame!

Ah, the wrongs that might be rightened  
If we would but see the way!  
Ah, the pain that might be lightened  
Every hour of every day  
If we would but hear the pleadings  
Of the hearts that go astray!

Let us step outside the stronghold  
Of our selfishness and pride;  
Let us lift our fainting brothers,  
Let us strengthen ere we chide;  
Let us, ere we blame the fallen,  
Hold a light to cheer and guide.

Ah, how blessed—ah, how blessed  
Earth would be if we'd but try  
Thus to aid and right the weaker,  
Thus to check each brother's sigh;  
Thus to walk in duty's pathway  
To the better life on high.

In each life, however lowly,  
There are seeds of mighty good;  
Still we shrink from soul's appealing  
With a timid "If we could!"  
But the God who judgeth all things  
Knows the truth is "If we would!"

### Burning Bibles

THERE was a time when men and women were burned at the stake. In Brazil the Bible is still burned, as will be seen by the following announcement of the Anti-Protestant League, which appeared in one of the daily papers of Pernambuco:

"Occurring on the twenty-seventh of the present month the first anniversary of the providential inauguration of the League against Protestantism in the Penha Church of this capital, and desiring to celebrate it with the greatest pomp and religious devotion, the Central Directory and its respective Council in extraordinary session have resolved to observe the following program:

"There will be on a table under the majestic dome of the same church, exposed to the view of all, a considerable number of false Bibles, books, tracts and papers rotten with the grossest errors and revolting Protestant heresies, that were voluntarily delivered to those reverend Capuchin missionaries by many Catholics, to whom the ministers and pastors of the new sect sold them fraudulently, or offered them gratis, as the true Word of God!—and which are already destined to the flames."

The proposed burning was brought to the notice of the Brazilian Congress, and one of the ablest members denounced it as a violation of the constitution.—The Advance.

### Moravian Missions

The mission-work of the Moravian Church has interest for all engaged in extending the kingdom of Christ. They were among the earliest in modern times to undertake the work; have been pre-eminent in assuming the hardest fields, and in giving most largely in men and money for its support. From the annual report for 1902 we learn that the church at present operates fifteen separate mission provinces, and has under its care a total of 98,599 persons, served by 2,268 missionaries and assistants. The total expenses for the administration of every department of this enterprise amounts to \$462,700, while the total receipts for the last fiscal year are \$414,925. Owing chiefly to a falling off in legacies, the year closed with a deficit of \$47,775, but this will without doubt be only a summons to larger gifts in the present year, and before its close be liquidated. The increase in the number of native members in full church fellowship was 1,794, and the number of heathen baptized was 691. If these figures seem small, the character of the fields occupied by these missions must be remembered; when this is taken into account, such an increase proves both the faithfulness of the workers and God's blessing on their efforts.—Intelligencer.

### Family Prayers

I fail to find that modern society has any adequate substitute for the social benefits which resulted from this old institution. At family prayers all the residents in the household met together for once on an equal footing—the master and mistress, the children of the family, and the servants, without distinction of

age, sex or rank—and were reminded for at least ten minutes every day that they were all alike human beings, who were not only equal in the eye of their Maker, but who had a duty to one another. Not only this, but the habit of joining in song, even when the songs were exclusively confined to doggerel versions of the Hebrew psalms, was a social practice of great cultural value. The habit of reading a chapter of the Bible also supplied an element which is unfortunately lacking in the lives of the present generation, for even if the old Book was to be regarded only as a collection of myths, legends and non-historical narratives, it would nevertheless be true that it is a great, perhaps the greatest, piece of literature that the world possesses, and has exercised an influence over the evolution of the Western world which is beyond comparison greater than that of any other book.—W. T. Stead, in Good Housekeeping.

### Responsible for the Destiny of Others

"No man liveth unto himself." What we say, do and are, saves or damns others. By personal contact, by silent influence, by look, wink and nod, by word and act, we necessarily affect for weal or woe the eternal destiny of our associates. We are our brothers' keepers. We are responsible to God for the influence we exert upon their lives. We cannot shake off that responsibility.

We are responsible for others. When Horace Bushnell was a tutor at Yale he was a stumbling-block to all the students because he was not a Christian. He realized this himself, and yet he said, "How can I accept Christ or the Bible, for I do not believe in either one?" and then the question came to him as from God, "What do you believe?" and he said, "I only know there is a difference between right and wrong;" and God seemed to say to him, "Have you ever taken that stand where you would say, 'I am committed to the right, even if it ends in death?'" and he said, "I never have." Falling upon his knees, he said, "O God, if Jesus Christ be true, reveal him to me, and I will follow him;" and he began to walk in the light which constantly increased, and almost every student in Yale came to Christ.—Religious Telescope.

### "Why Didn't You Tell Me?"

A young man accepted the position of organist in one of the principal churches of a Texas city. He was a fine musician, but, being blind, was unable to read in the faces of his audience the great pleasure his music was giving. He was master of the organ, and his caressing touch on the keyboard sent out through its great pipes the songs of his soul—his cry to his kind.

They listened enchanted, and would talk to each other about the beauty of his harmonies, the uplifting influence of his symphonies. At first he played as one sure of himself. There was no hesitation in his touch. Then there pealed forth splendid peons of praise and cadences of majestic sweetness and power. As he played Sabbath after Sabbath they noticed that the erstwhile triumphant strains of voluntaries and recessionals had given place to delicate, sorrowful improvisations to plaintive minor fugues.

The people listened in rapture, and often the sweetness of the harmonies sent tears adown furrowed cheeks of those who had lived and suffered—who by the blind man's music were comforted. But alas! they never thought to tell the player; they did not know for what his heart was longing. One morning it was announced that he would play no more after that service; that his decision was final, and another organist must be secured.

After the service a lady who had enjoyed all his music thoroughly went up to him, and said, very earnestly, "I am sorry you will not play for us longer. I have enjoyed your music so much. It has helped me greatly; it has soothed and comforted me when I sorrowed. I have thought many times I would tell you what an inspiration I have received through your music. I thank you for it."

The young man's voice faltered, and the tears rushed to his sightless eyes, as he whispered, "Oh! why didn't you tell me? I, too, needed comfort and inspiration."—American Home Journal.

### Don't Forget It

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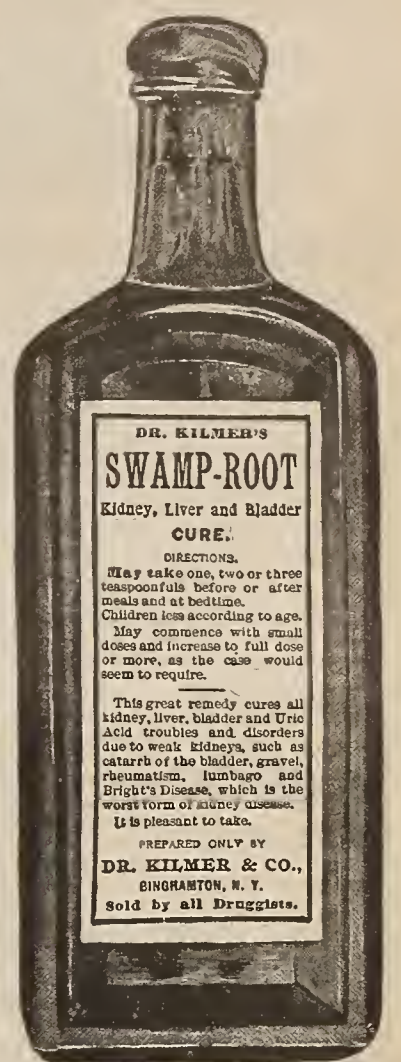
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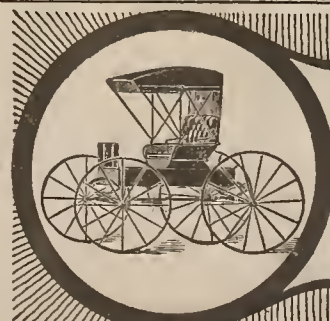


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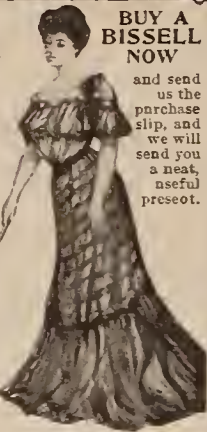
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SHORT ETON  
TUCKED SEVEN-GORED SKIRT

THIS season's fashions afford such a wide range that every woman should be able to affect a style best suited to her, and yet meet all the requirements of the prevailing mode.

### Military Jacket

A smart-looking jacket is shown in this model. It is a military jacket, and things military, you know, are high in favor in the fashions of the spring. It is a tight-fitting coat, one designed to emphasize the pretty curves of the figure.



1830 FICHU WAIST  
FULL PLAITED SKIRT

phasize the pretty curves of the figure. Fancy braid applied in straps is used to simulate a yoke back and front, and the front of the coat is also trimmed with the braid in military fashion. The coat has a high standing collar. The leg-o'-mutton sleeve is cut in two pieces, and finished with an attractively strapped cuff. In black or dark blue ladies'-cloth or

## How to Dress

broadcloth this coat would be very smart in style trimmed with one of the new fancy black silk braids and gold buttons. The pattern for the Military Jacket, No. 250, is cut for 36, 38 and 40 bust measures.

### Fancy Waist

This dainty waist will often be indispensable to the woman whose frocks are not as many as she wishes them to be. It is charming made of either all-over lace or all-over embroidery. The foundation-waist is of plain silk, made with a few gathers in the back at the waist-line and a very slight pouch in front. This silk waist is covered with the lace. The upper portion of the sleeve and the deep cuff are of lace. The puff below the elbow may be of chiffon, silk or crepe. In pistachio-green it looks well. The pattern for the Fancy Waist, No. 251, is cut for 34, 36 and 38 bust measures.

### Short Eton and Tucked Seven-Gored Skirt

Here is a skirt-and-coat frock unusually smart in style. The Eton jacket is to be high in fashionable favor this spring, and this little model is one of the newest and most approved designs. It is made short enough to show to advantage the deep girdle, and has two tucks on either side of the front and the back. The neck is cut V-shape, and the chemisette and collar are in one piece. The deep, full girdle, which is the same width back and front, is fitted on the waist-lining. The Eton is trimmed with bands of Oriental embroidery to emphasize the long-shoulder line. The full bishop-sleeve is made with a turn-back cuff. The seven-gored skirt is tucked back and front to flounce-depth, below which the fullness is let out. The lower part of the skirt is finished with three deep tucks and a hem. The skirt is made with a drop-skirt of silk, or soft-finished percaline with a silk flounce. Canvas, etamine or any of the attractive silk-and-wool novelty-goods may be used for this costume, or even voile. All the sheer fabrics are to be immensely in favor this spring; the tucked, plaited and shirred skirts more or less necessitate this. The pattern for the Short Eton, No. 256, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Tucked Seven-gored Skirt, No. 257, is cut for 22, 24, 26 and 28 waist measures.

### 1830 Fichu Waist and Full Plaited Skirt

This fascinating gown, with its touch of quaint charm, will be found a satisfactory model for evening or at-home wear. The waist is made with a deep 1830 yoke back and front, and a plaited fichu finished with a circular lace frill. The fichu falls well off the shoulders in the new approved fashion. The lower part of the waist is made with a slight blouse in front, and a tight back, with a few gathers at the waist-line. It is finished with a wide girdle belt. Three dainty puffs make the very pretty sleeve, which ends just below the elbow. The full plaited skirt is cut in five gores. The plaits start at the waist-line, and run all around the skirt for about one fourth of its depth, and then the fullness is let out. One of the new plain or embroidered voiles would be an effective material to use for this lovely frock, combining it with an all-over lace, using the lace for the deep yoke, the circular frill which finishes the fichu, the long stole-ends which depend from the girdle, and the band which trims the skirt at the bottom. In chiffon cloth or peau-de-crêpe it would also be attractive. Daffodil-yellow is a favorite spring color for a frock of this sort. The pattern for the 1830 Fichu Waist, No. 252, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Full Plaited Skirt, No. 253, is cut for 22, 24, 26 and 28 waist measures.

### Stock, Belt and Cuffs

These dainty accessories to the shirt-waist suit will be found useful to every woman who has learned how much the little things in dress count. The stock and belt are made on a thin crinoline foundation; the bow of the stock is tied in the new approved fashion, with two ends at the left and the two loops at the right. When the shirt-waist suit is made of some soft material like cotton damask,



FANCY WAIST

scrim or very fine momie-cloth it is well to have the stock, belt and cuffs of the same material as the dress. It gives them a pretty touch to have the ends scattered with French knots in a contrasting color. The patterns for the Stock, Belt and Cuffs, No. 284, are cut in medium and large sizes.



MILITARY JACKET

### An Odd Conceit

In order to make summer hats as light as possible, buckles and ornaments of gold, steel and jet are duplicated in straw matching the ornaments in color, and frequently glistening in much the same way as metal. Straw buttons are used, also large rings, through which loops of ribbon or silk may be thrust.—Modes.



STOCK, BELT AND CUFFS

### PATTERNS

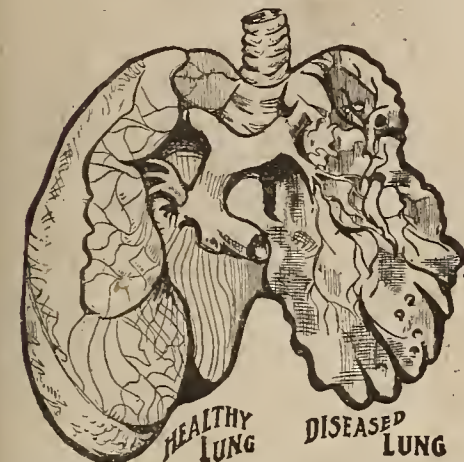
To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired. Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.



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## Prize Puzzles

Residents of Springfield, Ohio, are not allowed to enter the contests.

### THE PROVERBS AND CONUNDRUM PUZZLE

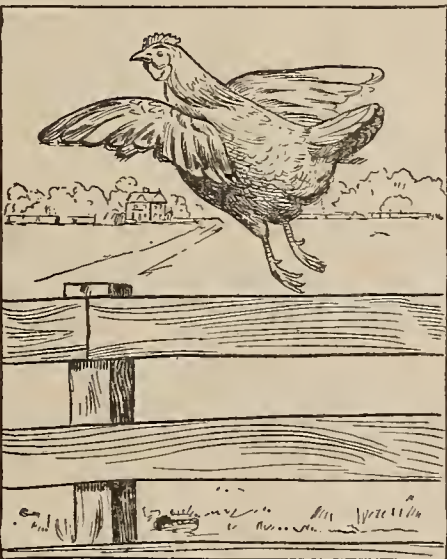
Here are Five Proverbs and One Conundrum, the latter illustrated by the Picture. Can You Supply the Missing Words in the Proverbs and Answer the Conundrum Correctly?

- 1—A \_\_\_\_\_ may look at a king.
- 2—All the \_\_\_\_\_'s in the fire.
- 3—All our \_\_\_\_\_ are swans.
- 4—Be sure you're \_\_\_\_\_, then go \_\_\_\_\_.
- 5—Better a witty \_\_\_\_\_ than a foolish \_\_\_\_\_.
- 6—Why does the chicken in the picture suggest a bad deed?

We Offer Eight Dollars Cash in Four Prizes, as follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before May 15th.

Also a Prize for Each State and Territory

As further rewards for our great family of readers, a "History of the Civil War" will be given for the first correct list of answers received from each state and territory. This means a book for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the books will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.



### ANSWERS TO PUZZLES IN THE APRIL 1st ISSUE

#### The Dog Puzzle

- |                 |              |
|-----------------|--------------|
| 1—Newfoundland. | 4—Pointer.   |
| 2—Spitz.        | 5—Setter.    |
| 3—Mastiff.      | 6—Coach-Dog. |

The cash prizes are awarded as follows: Man's cash prize, two dollars—A. L. C. Buchwalter, Davenport, Washington. Woman's cash prize, two dollars—Mrs. Doctor White, Lindsay, Ontario, Canada. Girl's cash prize, two dollars—Mary P. Chancellor, Brighton, Colorado. Boy's cash prize, two dollars—Harry Barry, Toronto, Ontario, Canada.

As a consolation prize a beautiful study of dogs, entitled "An Impudent Puppy," is awarded the following persons, whose lists were the first to reach us from their respective states:

- Alabama—Leslie Moseley, Anniston.  
Arkansas—Russell D. Leas, Little Rock.  
Arizona—Chas. F. Berger, Phoenix.  
New Brunswick—Marion Dunn, Harcourt.  
Canada—Ontario—John A. Lucas, Hamilton.  
Nova Scotia—Mrs. John W. Reid, Elmsvale.

- California—Naomi Curtis, Hynes.  
Colorado—Ellen McNaughton, Boulder.  
Connecticut—Howard R. Brackett, Bristol.  
Delaware—Helen R. Fisher, Wilmington.  
District of Columbia—J. T. Holt, Washington.  
Florida—Augusta Porter, Jacksonville.  
Georgia—Mary Floy Mauck, Clarkston.  
Idaho—James Albert Bennett, Cambridge.  
Illinois—John Eilerman, Chicago.  
Indiana—John M. Kinney, Muncie.  
Indian Territory—Robbie Anderson, McAlester.  
Iowa—Nettie Parmely, Ontario.  
Kansas—W. J. Hite, Walnut.  
Kentucky—Eugene Ritzler, Falmouth.  
Louisiana—Samuel Snodgrass, Jr., New Orleans.  
Maine—Mrs. Josie E. Hooper, Norridgewock.  
Maryland—G. H. McKindless, Cumberland.  
Massachusetts—Edna P. Sparks, Chicopee.  
Michigan—Mrs. G. E. Pooler, Burroak.  
Minnesota—Walter Root, Spring Valley.  
Mississippi—E. C. Godman, Crystal Springs.  
Missouri—Mrs. W. W. Kearney, Lowry City.  
Montana—Alice Cox, Missoula.  
Nebraska—Walter Bressler, Wayne.  
Nevada—F. R. Birdsall, Winnemucca.  
New Hampshire—Minnie Morrill, Lakeport.  
New Jersey—Isabel F. Pancoast, Bridgeton.  
New York—Elsie Greiner, Naples.  
North Carolina—Mrs. J. H. Cole, Greensboro.  
North Dakota—Mrs. F. E. Kindred, Cummings.  
Ohio—Geo. L. Ehrensberger, Cincinnati.  
Oklahoma—Mrs. J. L. Ott, Ames.  
Oregon—Miss L. L. Woodward, Forest Grove.  
Pennsylvania—Leone Bouch, Johnstown.  
Rhode Island—Katherine D. Salisbury, Bristol.  
South Carolina—Geo. W. Lomax, Jr., Abbeville.  
South Dakota—Ruth Hyde, Clark.  
Tennessee—Edna M. Galbraith, Mill Spring.  
Texas—R. M. Clark, Amarillo.  
Utah—Adolphus Christensen, Clearfield.  
Vermont—Florence J. Read, Shelburne.  
Virginia—Oakley M. Bishop, Riner.  
Washington—Archie W. Pritchard, Cheney.  
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Wisconsin—Mrs. F. P. Carter, Lyndon Station.  
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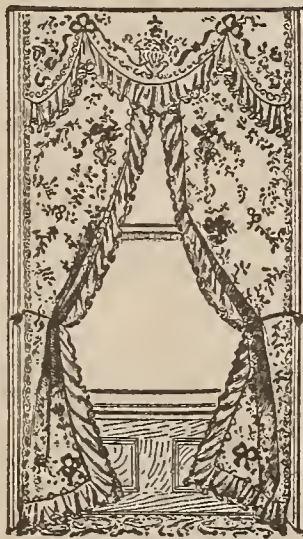
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## PART I.

AMANDA WEDOWFIELD wiped her dinner-dishes sitting where her eyes commanded a view of the country road as far as the forks. She did her work sitting for the reason that as one approaches threescore years one finds a penny's worth of strength saved worth a pound to be regained. She watched the forks because it was at that point that Andy Loftus, the rural postman, first came into view, urging forward his horse and swaying from side to side in his little cart. Andy always stopped at Squire Melker's, a mile to the southwest, for his dinner, after which he came up the left line until he struck the handle of the fork, whence his route lay past the Wedowfield farm.

"There—there he comes now!" she sighed, with satisfaction, as the last spoon was polished off and fell jangling among its fellows. She hung up her dish-cloth hastily, and then with breathless interest ambled toward the front door. Would Andy stop, or would he drive right by to-day? He had never failed on a Tuesday since the children left home, yet there was always this fear. Oh, heart-beats—he was stopping!

At that instant a movement in the lilac hedge caught Amanda's attention. "Pshaw! there's Joel!" she exclaimed, angrily. "He always has something to do in the front yard on a Tuesday just after dinner!" Her petulance sprung of a positive knowledge that her aged spouse would intercept whatever Andy had to leave, and that instead of the nimble steps of the postman she had now to await the slow and methodical movements of her husband, besides losing the charm which comes of being the first to greet a cherished object sure to contain surprises.

Joel Wedowfield glanced at the two letters handed to him, exchanged a few words with Andy, and then sauntered up the long sandy path toward the house. He would have gone on to the side door, but Amanda spoke to him from the front steps.

"What you got, Joel?" she asked, testily.

Joel started in surprise, and drew the lines of elation out of his face. "Nothing for you," he answered, a little autocritically. "A letter to me from Allie, an' another from—" He looked again at the second letter. "Pshaw!" he ejaculated, in vexation, "I hadn't seen that 's' on there. Tother is for you, after all, Mandy," he added, with much chagrin.

By this time Amanda had descended the steps and stood by his side. She snatched her letter greedily from his hands. "You better wear your specs all the time. Joel Wedowfield! I guess 'tis for me! An' it's from Harry, too!" she declared, her eyes snapping fire in spite of their age.

Amanda turned about wrathfully and reëntered the house, too incensed to have further words with him. She pushed her rocking-chair to the window overlooking the porch, and then, her fingers trembling with eagerness, broke into the envelope. The work was bunglingly done—at first a great three-cornered tear, through which she tried vainly to extract the contents; then tear and tear again, until the wrapper was hopelessly destroyed—but Harry's letter at length lay open before her.

Joel had seated himself on the porch without, his feet resting on the lower steps. He turned his letter over and over, a fond old man's smile teasing the muscles about his eyes and the corners of his mouth. He drew out his knife, felt the keen edge of the blade, then deftly cut the end of the envelope, making a line so clean and sharp that a little squeeze was required at the sides to reveal the opening, through which the letter itself was then readily withdrawn.

"Well, what did Allie say?"

"Huh?" Joel hitched about, and glanced up at his wife, who had risen and come to the door behind him. They had both finished reading their letters. "O-oh," drawled the husband, "she's well. Sent her love to you, Mandy. That's about all."

"Ain't you goin' to let me read it?" his wife inquired, tentatively, yet with a certain defiance in the way she held her second pair of glasses.

"I don't know's I be," Joel returned, coldly. "You never let me read yours from Harry."

"Why, Joel Wedowfield, I always do!"

"You never do till you've kep' 'em so long I don't care whether I read 'em or not," he returned, slightly modifying his exaggeration. "Anyway, I've told you all Allie wrote that was meant for you, I guess." However, turning and facing her squarely, he altered his tone with a bargain in view. "Are you goin' to let me see Harry's?" he asked.

"No, I ain't!" she snapped. "I was goin' to, but seein' you're so mighty partic'lar 'bout your letter, I guess I can be partic'lar 'bout mine, too. You'd 'a' liked to 'a' kep' 'em both! Harry writes as plain as print. The idee o' your thinkin' his Mrs. was Mr.! I'll have him direct to Mrs. Amanda Wedowfield after this; I don't care if it does signify a widow. I might as well—"

"Didn't Harry send no message to me?" asked Joel, breaking into her angry words, a note of disappointment marking his own.

"I ain't goin' to tell whether he did or he didn't!" she retorted, satisfied now that she had the thumb-screw on him; and she slammed the door, shutting herself in and Joel out.

At night, when the supper-dishes had been removed, and the lamp lighted above the dining-table, both Amanda and Joel slipped out their letters and re-read them surreptitiously behind the pages of "The Christian's Weekly." Now and then Joel's eyes were lifted to the face of his wife above the paper shield, and more than once his lips moved with the intent of proposing an armistice under which an exchange advantageous to both might be effected. But before the slow words came, Amanda had raised her eyes each time, glancing over her double glasses, to see that Joel still read his paper. He would not be caught watching her, so his own lids were dropped quickly, and the peace proposition was left to smother in his breast. If either spoke, it was to make some covert thrust at the other.

"Oh, hum! I get so tired bringin' in chips from the shed," sighed Amanda. "Harry used to be real thoughtful 'bout savin' my steps."

## Cupid Plays Rip Van Winkle

By ALBERT LATHROP LAWRENCE

Joel was not long in returning this insinuation. "Allie's cocoanut-cake never used to give me the dyspepsia," he complained. "Seems as if I had it a good deal lately."

In either case the speaker had reflected a very martyr-like spirit, but his listener quite as often robbed him of any satisfaction by ignoring such remark altogether.

When the clock struck nine, Joel rose and yawned. Very deliberately he drew off shoes and socks, then removed his coat and vest, which he hung over the back of a chair. "Come, Mandy, it's nine o'clock," he repeated, impatiently, and disappeared through the darkened door leading to their bedroom. Almost immediately his snoring told of unconsciousness.

Presently Amanda stole around to the chair, drew Allie's letter unblushingly from Joel's coat-pocket, and read it with the greatest zest, sitting where he had sat but a moment before. A little reverie followed the reading, during which the lines in Amanda's face ran the gamut of expression from the blandest smile of self-satisfaction to a look of angry and jealous defiance. It ended with a snort and "The idee o' layin' it to my cocoanut-cake! I make jest as good as Allie any time! The last time it was pie—I might 'a' told him so. He's jest gettin' old, that's all. His stomach's wearin' out. Besides, I wonder who he thinks learned Allie to bake!" By this time pride had come to subdue the fire that burned in her eye, and presently she started, realizing the lateness of the hour. Replacing the stolen letter, she hid her own behind the tea-caddy in the cupboard, turned out the light, and groped her way to Joel's side, where she fell asleep before the clock struck the next half-hour.

With little change Wednesday and Thursday evenings saw a repetition of Tuesday night's performance, but by Friday the situation had altered materially. Joel, moreover, was willing to risk his wife's displeasure with a fresh proposal. "I should think you'd want to read Allie's letter, Mandy," he began, his voice ringing good-will. "She's talkin' some o' havin' us come out an' visit her purty soon." This was an interpretation the text would hardly bear out, but Joel was bound to arouse her curiosity if he could.

"I guess if she'd anything partic'lar to say to me she'd 'a' writ it right off to her mother in the first place," returned his wife, with exasperating indifference. "We couldn't go anyway, you know, 'cause who'd take care o' the farm? Besides"—and here was her real grievance—"if you don't want to see Harry's letter, I guess I can stand it if you can." It was quite impossible to hide her anger for his two days' seeming lack of interest in her first-born and favorite child.

"That's jest it, Mandy—I do want to see Harry's letter," Joel frankly admitted, hiding nothing of his intense eagerness.

"You hain't said nothing 'bout it!" she declared, with jealous interest. "I guess you hain't cared very much."

"I did, too, Mandy!" he affirmed, stoutly, gesticulating with his free arm. "I spoke 'bout it the day it come, an' you shet the door in my face! You said I shouldn't see it—that's what you said! But I've wanted to see it—there hain't been a minute since it come that I hain't wanted to see it!" he declared, crushing all pride. "Here's Allie's—if you'll let me see Harry's!" And Joel shamelessly dropped "The Christian's Weekly," exposing the daughter's letter to view, where he had read it for the tenth time.

"Oh, well—if I can find Harry's," assented Amanda, mollified by his manner, and really glad of the chance opened for her. More than once in the last two days she had come frightfully near revealing knowledge gained from her stolen perusal of Allie's letter.

She ambled into the dark of their bedroom, but reappeared almost immediately, bringing out nothing that she had not that moment carried thither. Even then the coveted letter was not handed to Joel until her fingers had fastened on the one she was to receive in exchange.

Knowing the contents of Allie's letter, Amanda was not engrossed by it now, but found time to fire repeated questions at Joel. He, however, was completely absorbed in his son's epistle, and answered only with grunts of assent and dissent. At last, when his wife demanded something more, he cried out, petulantly, "Dumb it, Mandy, can't you see I'm readin'?" After this profane explosion, as Amanda was pleased to term it, they became almost amiable, and discussed their children's letters until ten o'clock—a late hour for the old couple. Their amiability continued the next day, and on Sunday, when the father answered the daughter's letter, and the mother the son's, one might have mistaken them for a well-sorted pair. But this marked the maximum. According to rule, the children were writing their parents again that same day; on Monday their letters would be posted, and Tuesday would begin a revival in the old home of all the jealous interest that had marked the week just closed.

This was the narrow orbit through which these twin stars circled week in and week out. It would be interesting to trace in detail their evolution from the first nebulous moment when parental affection changed, to the present narrow and confirmed jealousy in each for the child of the opposite sex. But that would be a long story, and the fewest words must suffice. Neither had as yet realized in himself the years which were constantly before his eyes in the other. Moreover, both were moved unconsciously by something in his favorite child akin to what, thirty years ago, had led the mature lovers to pledge each other for life. That the father sometimes called the daughter "Mandy," and his wife as often called their son "Joel," was to the children an indication only that their parents were getting old.

Harry had been the first to leave the home, where, though outward show of affection was rare, a bond had

really existed so strong that years might not destroy. His weekly letters had been directed to the mother; now and then one had come to his sister; rarely had there been one for the father, though the others were sure to contain messages for him. This partiality was due to no weakening of the ties between father and son, but rather because of the fact that the boy and his mother had from the first made more of each other.

Joel felt the slight, however, though he made no sign. He still had the daughter, and for the loss of his son's companionship in the fields and about the barns he sought recompense in Allie's society. He always asked her to accompany him to town on market-days now, and voluntarily bestowed on her many such favors as heretofore she had had to wheedle out of him. Amanda was then the one to go early to bed, while Joel and Allie sat late and talked of the thousand things about the farm that amounted to nothing save that it gave them each other's society. With the selfishness of youth, Allie played upon the old man's increasing fondness, though not to the extent of a mean or designing spirit.

As the day drew near when Allie was to marry Hamilton Price, and go to live in the city a hundred miles away, she thought of the father as the one who would miss her more than the mother. "But I'll write you, pa; I'll write you every Sunday, just as Harry writes to ma," she said; and though at first spoken playfully, the words blazed the way for a definite purpose, that in the weeks which followed grew into a fixed custom.

And now, jealously guarded, locked in a little drawer in the cherry-stained desk that stood against the east wall of the dining-room, Joel cherished a small packet of letters tied with a pink ribbon. Amanda had a larger packet, tied with a blue ribbon, snugly stowed away in the bottom of the dresser in the bedroom, where also were hidden—lest thieves break through and steal—her solid silver spoons and the little bag containing her egg-money. Until a letter was a week old it was not added to the store thus accumulating, but was kept about where it could be easily referred to and surreptitiously read at night, as has been seen. During a spell of rainy weather, or on a Sunday, maybe, the entire lot was brought out and eagerly perused; often this was done to settle some dispute which the lonely couple had fallen into regarding their absent children.

It was the fate, indeed, of the very next letter to raise such a quarrel. The little drama had progressed as far as the second reading behind "The Christian's Weekly." Suddenly Amanda folded her paper, carefully hiding the written sheets that had held her attention, and looking over the ramparts that shielded Joel, fired this shot: "I don't b'lieve you ever intend to sell that black heifer! You know you give it to Harry more'n a year ago, an' now he wants the money for it. I didn't never think, Joel Wedowfield, to live to see you so mean as to cheat your own son!" Amanda removed her extra pair of spectacles the better to glare at her husband.

Joel let fall his copy of "The Christian's Weekly" over Allie's letter, and calmly stared at his wife. "It wa'n't the black heifer that Harry wanted me to sell," he answered, in his careless drawl. "It was Black Moll's heifer. Besides, I've sold her, an' sent Harry the money. What'd he say 'bout it in his letter?"

"Good stars! Joel Wedowfield, that's jest like you! Go, an' sell the very creature Harry thought most of! I ought to 'a' known you would! Don't you remember," she demanded, her voice trembling with rage, "what a fuss Harry made over Little Spot when he was home last summer? No, o' course you don't! It was Allie's gettin' married an' leavin' home that robbed you o' all your senses!"

"I'd like to know what started you up on that now, Mandy," interrupted Joel, with some impatience. "It was Black Moll's heifer that Harry wanted me to sell. I give 'em both to him at the same time. I guess I see what he writ in his letter. His writin' ain't always as plain as it might be, but I didn't make no mistake there—"

"You did, Joel Wedowfield! If you sold Little Spot, you done jest exactly what Harry didn't want you to—"

"Besides," continued Joel, refusing to be interrupted, "I don't know's it makes any difference which I sold. He's got the money, an' a good price, too."

"No, o' course it don't make any difference," she repeated, with curling lip and withering irony. "You don't care whether Harry's pleased or not! If it had been some o' Allie's sheep, now—trust you never to make no mistake there—"

"I tell you I hain't made no mistake!"

"You have, too, Joel Wedowfield!"

"I say I hain't!"

"You say what ain't so, and I can prove it to you!" Thereupon Amanda rose, and made a pretense of going for the letter which she held concealed in the pages of "The Christian's Weekly."

"Let me see your letter," said Joel, as she returned from the bedroom, but there was no passion in his impatience.

"Well, I guess not!" snapped Amanda. "I ain't done with it yet! I guess I'll write to Harry that next time he's got anything to sell he better let me do the sellin'."

"How much do you think you'd 'a' got for the heifer—either one of 'em?" demanded Joel, digging a pit for her to fall into.

"I'd 'a' got forty dollars if a cent!"

"I got fifty," he declared, with calm satisfaction.

As he had been the purchaser, and both calves remained on the farm, there was nothing for him to get excited over.

"It was a fool's luck that you did," Amanda retorted, "an' you certainly had a fool for a purchaser! Fifty dollars!"

Joel had a keen sense of humor; he appreciated this thrust home in the dark. It added zest, too, that she could not understand his laugh, but must feel only its tormenting effects.

The clock struck nine, and Joel rose and made ready for bed. Amanda had not found in Harry's letter of



that day what she looked for, so the packet tied with the blue ribbon was brought out. She fired a parting shot at her husband, twitting him with haste to get to sleep before she should prove him wrong; and Joel, restored in temper by the turn of affairs, allowed her this last word with no ill feeling.

Joel's first nap was scarcely thirty minutes long, but he started and awoke with the sense of having slept for hours. The lamp burning at full flame in the dining-room shone with blinding effect on the white counterpane that covered him. He rose to a sitting posture with a swift thought of robbers when he realized that Amanda was not by his side. Indeed, his blinking eyes saw her now through the open door. She was kneeling before the cherry-stained desk where he kept Allie's letters. She had just replaced the little drawer, and Joel heard the key turn as it was relocked; then she came toward him, but only to the chair where his vest hung, carefully returning the keys to his pocket.

The shame which Amanda should have felt for her discreditable act seemed somehow to fall on her husband. He lay back upon his pillow and closed his eyes, feigning sleep, lest she should know that he had discovered her red-handed. But Amanda noticed a difference the instant she reached the bed after turning out the lamp. She stooped above him, startled by a sudden thought that he had ceased to breathe. Amanda had long had a disquieting feeling, revealed to no one, that she should sometime come upon Joel dead in bed.

But Joel sighed, and turned upon his face. Long after Amanda lay peacefully unconscious by his side he was kept awake by a troubled spirit. Dark as it was, he still seemed to see her on her knees before his desk like the thief that had first been in his thoughts. Perhaps this phantom of the mind colored his wife's action, for Joel sighed often, and often he put his hand to his brow. Was it her custom thus to take advantage of this hour and his unconsciousness? There was no answer to Joel's question, but an overwhelming sense of loss in his wife possessed him, magnified by the darkness and the still hours of the night, as all things ill will be.

[TO BE CONTINUED]

#### Catalogues Received

H. W. Buckbee, Rockford, Ill. Seed and Plant Guide for 1904.

D. Hill, Dundee, Ill. Nursery catalogue. Evergreens a specialty.

Willow Brook Farm, Berlin, Conn. Catalogue of Buff, Black and White Orpingtons.

Ellwanger & Barry, Rochester, N. Y. General catalogue of the Mount Hope Nurseries.

Royal Carriage Company, Cincinnati, Ohio. Catalogue of buggies direct from factory to buyers.

Kokomo Fence Machine Company, Kokomo, Ind. Illustrated catalogue of ornamental fencing.

Chas. A. Cyphers, Buffalo, N. Y. Illustrated catalogue of the Model incubators and brooders.

Harder Manufacturing Company, Cobleskill, N. Y. Illustrated catalogue of the Harder round silos.

C. M. Hiles, Cleveland, Ohio. Gestation calendar and circulars of the O. I. C. Swine-Breeders' Association.

B. F. Freeland Sons Company, Sturgis, Mich. Illustrated catalogue of galvanized-steel tanks, heaters, etc.

The Geo. A. Sweet Nursery Company, Dansville, N. Y. Catalogue of high-grade fruit and ornamental trees.

The Dust Sprayer Manufacturing Company, Kansas City, Mo. Descriptive catalogue of the Cyclone dust-sprayer.

Stowell Manufacturing and Foundry Company, South Milwaukee, Wis. Booklet illustrating and describing hay-tools.

Peter Henderson & Co., 35 and 37 Cortlandt Street, New York. Illustrated catalogue of garden and farm implements.

Peter Henderson & Co., New York. American Farmers' Manual, listing seeds of grasses, clovers, cereals, forage-plants, etc.

The Keystone Farm Machine Company, York, Pa. "A Book of Field Scenes," illustrating the Hallock shallow cultivators.

A. B. Farquhar Company, York, Pa. Illustrated catalogue of steam-engines, sawmills, grain-separators, stackers, horse-powers, etc.

Central Michigan Nursery, Kalamazoo, Mich. Illustrated catalogue of hardy fruit and ornamental trees, roses, shrubs, small fruits, vines, etc.

George Morton, St. Louis, Mo. "The Coming Country," a paper issued and distributed by the Missouri, Kansas & Texas Railway Company.

#### It Might Surprise You

if you were to learn that one of our free trips to the St. Louis World's Fair was won by a club-raiser who secured only twenty or thirty subscriptions. Well, such things have happened. See page 23.



## REST AND SLEEP

### ADVICE FOR THE TIRED WOMAN



HE woman of the office or shop has more cause than the housekeeper to wear out in days like these. The housekeeper should find time for a nap; she can get into loose clothing, while the business

woman must fight it out until the end of the day's work. The tired woman comes home from the office completely fagged out. She is nervous; she finds she cannot rest; she rolls and tosses through the night, a victim of insomnia. The housewife, perhaps the mother of a large family, and doing her own housework, should take some little leisure in the middle of the day, if it only be for ten minutes. Slip away from cares and duties, and throw yourself down on lounge or bed for a little while. Try to relax every muscle until your body feels heavy. Then try and stop thinking; relax your mind; throw off worry. For those ten minutes or half an hour lie perfectly still. This is the advice of the greatest woman's specialist of our time, Dr. R. V. Pierce, founder of the Invalids' Hotel and Surgical Institute, at Buffalo, N. Y. Furthermore, he says the woman who is employed in stores or shops, working at the highest tension all day, must above all things get a good night's rest. A tepid bath and a cup of cocoa or warm milk before going to bed, or perhaps a little light exercise, with the window open so that you breathe pure air, will act upon the nerves, quieting them and soothing the tired-out woman into the first sweet slumber, which

leads to a long, restful sleep. If such simple treatment, says Dr. Pierce, has no effect on the nervous system, then the woman should resort to some vegetable tonic which will soothe the nerves.

Is it a headache, a backache, a sensation of irritability, or twitching and uncontrollable nervousness, something must be wrong with the head or back, a woman naturally says, but all the time the real trouble very often centers in the womanly organs. In nine cases out of ten the seat of the difficulty is here, and a woman should take rational treatment for its cure. The local disorder and inflammation of the delicate special organs of the sex should be treated steadily and systematically.

Dr. Pierce, during a long period of practice, found that a prescription made up entirely of roots and herbs, without the use of alcohol, cured over ninety per cent of such cases. After using this remedy for many years in his private practice, he put it up in a form that would make it easily procurable, and it can be had at any store where medicines are handled.

Backed up by over a third of a century of remarkable and uniform cures, a record such as no other remedy for the diseases and weaknesses peculiar to women ever attained, the proprietors and makers of Dr. Pierce's Favorite Prescription now feel fully warranted in offering to pay \$500 in legal money of the United States for any case of Leucorrhea, Female Weakness, Prolapsus, or Falling of Womb, which they cannot cure. All they ask is a fair and reasonable trial of their means of cure.

They have the most remarkable record of cures made by this world-famed remedy ever placed to the credit of any preparation

especially designed for the cure of woman's peculiar ailments.

Sick women, especially those suffering from diseases of long standing, are invited to consult Dr. Pierce by letter, free. All correspondence is held as strictly private and sacredly confidential. Address Dr. R. V. Pierce, Buffalo, N. Y.

"Your medicines are certainly a blessing to suffering women," writes Mrs. Ella Sauerwald, 1935 W. Pratt Street, Baltimore, Md. "I suffered with female weakness very badly, was extremely nervous at all times, had indigestion, could not sleep, constant dull headache—in fact, was very miserable when I began to take your medicines, but after taking them a short time I began to feel better. My nerves were better, could sleep at night, headache ceased, digestion was improved, I felt like a new woman, and could go around and attend to my household duties, which previous to taking your medicine I could not do. Dr. Pierce's Pleasant Pellets cured me of constipation of many years' standing. I took eleven bottles in all—six of 'Favorite Prescription' and five of 'Golden Medical Discovery,' and also two vials of the 'Pleasant Pellets.' I am sure if more women who suffer would take Dr. Pierce's medicines, they would soon be convinced of the good they can do."

Your most important knowledge is knowledge of yourself. You should read a complete "Doctor" book, called "The People's Common Sense Medical Adviser." Has reached its sixty-third edition of over 2,000,000 copies. Send 21 one-cent stamps to Dr. R. V. Pierce, Buffalo, N. Y., for this 1008-page book in paper covers, or 31 stamps for a copy in cloth binding.

## Annual Offer of Beautiful Ever-Blooming Roses.



A Liberal Offer of Beautiful Roses, including the most beautiful hardy climbing rose in existence, the "Crimson Rambler." All handsome, well-rooted, hardy plants. Last year's offer was accepted by thousands and all were delighted. Your homes and flower beds made more beautiful at very trifling expense. A very small sum secures a wealth of Beauty and Fragrance which will last for months. The Rose is the most popular flower and every family should grow them in profusion. This is the finest collection of Roses ever offered as a Premium.

In order to more thoroughly introduce The Housewife we will send it until December next including the Six Splendid Roses for only 25 cts.

## THE HOUSEWIFE

### THE MOST HELPFUL HOUSEHOLD PUBLICATION IN AMERICA.

Nothing Frivolous, nothing Trashy, but Healthy and Wholesome Entertainment and Instruction for the American Housewife. Among the departments in THE HOUSEWIFE are the following: Among the Flowers, Edited by Eben E. Rexford, Mother's Hour, by Margaret Eytinge, The Kitchen, The Best Ways, Literary World, With Needles and Hooks and others. The stories printed in THE HOUSEWIFE are always Bright, Interesting and Wholesome. Hundreds of Bright Ideas, Useful Hints and Helps in every number and Beautifully Illustrated.

Briefly described the Roses given are as follows: The World-Renowned Yellow Marechal Niel, a beautiful, deep, sulphur-yellow, very large and exceedingly fragrant. Ever-Blooming Rose, Duchess de Brabant. This Rose combines exquisite perfume, beautiful coloring, and a matchless profusion of flowers and foliage. Ever-Blooming Rose, Queen's Scarlet, a valuable Rose for garden culture. New Climbing Rose, Crimson Rambler, one of the striking characteristics of this Rose is its remarkable color, which is of the brightest crimson, which remains undimmed to the end. Ever-Blooming Rose, White Maman Cochet, a snow-white Rose. Flowers extra large, and sweetly scented. The Ever-Blooming Mlle. Francisca Kruger, in its shading

of deep coppery-yellow it stands unique and distinct from all others. If you will send us Twenty-five Cents in Silver, Postage Stamps or Money Order, we will send THE HOUSEWIFE up to and including the December number together with the six above described Roses. All sent postpaid. Satisfaction guaranteed or money returned. This is a splendid offer. Address all orders

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# JAYNE'S EXPECTORANT CURES THE WORST COLDS

For 73 years the Standard Cough Remedy.



# The Great St. Louis World's Fair Opens

**A**PRIL 30th is the day set for the opening of the great Louisiana Purchase Exposition at St. Louis, and thousands of people from all parts of the world will pass through the gates to behold the magnificent splendor, the equal of which the world has never seen. This constant gathering of sight-seers from every nook and corner of the globe will continue day by day until December 1st, the date set for the closing of the fair.

Nearly every nationality on the face of the earth will be represented here, and the display of grandeur, wealth, art, science and invention will be stupendous, marvelous and wonderful beyond the power of description. So systematically and carefully will this immense exhibition be conducted, that even a small boy or girl could go through the entire exhibit without a companion.

The people of this generation will never again have the opportunity of beholding anything even approaching the magnitude and splendor of this exhibition, which in reality will surpass even a trip around the world—in fact, the world is brought almost to their own door. Wonderful is the progress of the twentieth century!

We trust that every one of the big FARM AND FIRE-SIDE family will have an opportunity to visit the World's Fair. The knowledge of the progress of the twentieth century to be gained here is, comparatively speaking, worth years of our life. It will furnish food for thought and conversation for time to come, and it will be the greatest educator for our own people in the history of the United States.

## The Palace of Education

The theory of the Exposition is that in its main intent it is essentially educational, and in accordance with its intent education is given the first place in the classification of the departments. This department includes not only elementary education, but also all grades up to the higher education of the universities, the technical institutions and training for the learned professions. Art schools and conservatories of music are also included. A novel department has to do with instruction in agriculture and forestry. Business and industrial training are exemplified by appropriate exhibits. Methods of instructing those who are mentally and physically deficient, including the deaf, dumb and blind, constitute a unique and interesting section. Educational publications, school furniture, appliances, plans and models of school-buildings and a variety of other educational features combine to render the department most instructive and complete.

## What the Farmer Can See

A complete department has been given to agriculture. The building for the indoor portion of the exhibit is one of the largest structures on the grounds. The estimated cost is eight hundred thousand dollars. The structure is six hundred feet wide by sixteen hundred feet long. It is built to show the products of the field, meadow and garden.

## Farms and Farming

The first group is open to farm equipment and to methods for improving land. This means that the subsection will include specimens of various systems of farming, plans and models of farm buildings, the general arrangement and equipment of the farm, and appliances and methods in use in agricultural engineering—that is, in machinery, draining, irrigation, and similar improvement schemes.

## The Farmers' Help

Agricultural machinery and implements constitute the farm staff of an agricultural establishment, and the spirit of invention is always at work on them in regard to possible labor and time saving points. This exhibit promises to be unique in its value to all interested in any department of the farmers' world. The implements, machines and appliances used on a farm are all classified under this schedule, including those for preparing and keeping the ground in order, for seeding, for cultivation, implements and appliances like sickles, scythes, reapers, mowers, diggers, machines for threshing and cleaning and separating, driven or worked by no matter what power. In this group will also be found miscellaneous articles like feed cutters and grinders, wagons and carts, wind and other mills, all the machines devoted to the purposes of the farm, whether moved by animals, wind, water, steam or electricity, apparatus for preparing food for animals and relating to the preparation, the preservation and the utilization of manures, including sewage.

## The Insidious Weed

It is planned that tobacco shall form a group. The subsection includes exhibits of raw materials in stalk,

leaf and seed; equipment for manufactures; construction of factories; laboratory appliances, and a display of manufactured products.

## Dairies and Creameries

As the fruits of the earth have their finishing-houses, so dairies, creameries, cheese and margarine factories, oil-mills, workshops for textile fibers, are included in the plan.

The breeding of birds, artificial hatching and fattening, market-gardening, and all that relates to the business, are also a part of the scheme.

## Literature of the Fields

What the farm yields directly and indirectly are subjects of other portions of the group—that is, specimens of cereals, legumes, tubers and roots, sugar and oil producing plants; methods of growing and preparing coffee, tea and cocoa; while forage, cured or in silos, and fodder will have a place side by side.

## Milk-Supply, Butter and Cheese

In close proximity will be ranged specimens of animal-food products—that is, edible animal fats and oils. Milk or cream in natural or treated conditions,

notes, for he will see the results of study and practice about soil and water, charts, census of animals, a history of agriculture in its successive changes, and of the fluctuations in the prices of land, rents, labor, live stock, crops and animal products. Institutions, coöperative societies, communities and associations that deal with or take part in experiments, and the advancement of farming, will all be shown.

## Loans and Insurance

From the want of a wider knowledge, the farmer too often regards the mortgagee as his enemy. This question has been incorporated in the group, and also the more provident aspect—agricultural insurance. A niche is set aside, in which the spectator may gather what is doing in his behalf in regard to legislative and administrative measures. It is anticipated that there will be an adequate supply of well-digested literature upon the subject.

## Preserved Flesh, etc.

In the art of living well the canners' business has displaced the seasons. The luxuries of spring may be preserved until autumn, while those of the summer months



THE PALACE OF EDUCATION

butter and cheese in their varied forms, eggs, the dairy and its appliances, and the distribution of these various products, form part of the department.

## Preservation of Foodstuffs

A ninth group relates to the equipment and methods employed in the preparation of foods. It proposes to deal with flour and starch mills, the manufacture of food-pastes, with bakeries, pastry-works and their fittings, ice-refrigerators, canning-factories, the sugar and chocolate and kindred industries, as well as with vinegar-works, distilleries, breweries, the manufacture of aerated waters, and the various industries connected with the preparation of foods.

## The Staff of Life

Flour from cereals, grain and its parts, tapioca, mixed farinaceous food, Italian and other pastes and infants' food constitute another group. Its neighbors are bread and pastry. This group is devoted to breads of all sorts, ship-biscuits, and pastry of all kinds peculiar to each country.

## Progress of Agriculture

Without a fair knowledge of agricultural chemistry the farmer of to-day is not fully equipped for the fight with the land. At St. Louis he will be able to compare

may be enjoyed in winter. By the contributions of exhibitors, specimens of the advance made in this branch of business will make up an exhibit. This will include meat preserved by freezing, salt or canned processes, or in tablets. Akin to these will be shown fish, lobsters, oysters and shrimps preserved by various processes, vegetables and fruits dealt with in the same manner, as well as by dried processes.

## Confectionery and Relishes

Small things for the table and for the kitchen keep a multitude of workers employed. It is arranged to allot space for specimens of such articles as sugar for the home, preserves and jellies, coffee, tea, chicory, etc., vinegar, salt, pepper, mustard, curries and spices, condiments, sauces and relishes.

## The Still and Vineyard

Aerated waters, ginger-ale and other non-intoxicating drinks, with that latest arrival, the soda-fountain, little known outside of America, are allotted space for display. Wines sparkling and still, brandies, syrups and liquors, aperients, various distilled spirits, as whisky, gin, rum, kirshwasser, etc., fermented beverages, as ale, beer, porter, cider, perry and all kinds of malt liquors and fermented drinks are the objects of other groups or classes.



THE LARGEST BUILDING AT THE EXPOSITION—PALACE OF AGRICULTURE AT THE LOUISIANA PURCHASE EXPOSITION AT ST. LOUIS



No Time to Spare

THE mean man whose birthday gift to his son consisted in washing the windows so the boy could look out and see the cars go by belonged to the same family as the man to whom the Washington "Post" introduces its readers. He was proprietor of a country hotel.

The rules of the hotel kept everything under lock and key, and there was no chance for the casual loafer to get newspaper, pen, ink, soap or anything else free. There were not even free seats in the office.

One day the proprietor saw a chronic loafer looking at the old time-piece which hung on the wall. The next day a large sign hung over the face of the clock. It read: "This clock is for the use of guests of the hotel only."—Youths' Companion.

Pity Mainly Sentimental

William H. Taft lectured recently in Philadelphia on the Philippines.

Mr. Taft said at the end of his lecture that there was too much sentimental pity in the world.

"The poorest and most wretched people are happier than we think, as a rule."

## Wit and Humor

### A Bucket-Shop

"Dad," said little Reginald, "what is a bucket-shop?"

"A bucket-shop, my son," said the father, feelingly, "a bucket-shop is a modern coöperage establishment to which a man takes a barrel and brings back the bung-hole."—Town Topics.

was feeling somewhat better." Mr. Williams says that the hypochondriac was one day telling a friend of his efforts to regain his old-time health. He ran over the list of doctors whom he had consulted. Whereupon the friend remarked, "Well, old man, I must say that you appear to have lots of faith in doctors." "Certainly I have," replied the sick man. "Don't you think the doctors would be foolish to let a good customer like me die?"—New York Tribune.



"You hit the bull's-eye, didn't you?"  
"Yes; and I had to pay for the bull, too."

### His Present

"John," she said, "your little wifey has been saving up her money to buy you a nice present."

"Good little wifey," he replied. "What is it?"

"A smoking-jacket," she explained. "And I saved the money all myself out of the house allowance. Now, wasn't I thoughtful?"

"Splendid!" he exclaimed.

"And now I wish you'd bring me home some more money to-night."

"What did you do with that I brought home last night?" he asked, in surprise.

"Oh, that's what I saved the smoking-jacket money out of," she answered, "and there wasn't any left."—Chicago Post.

### By Elimination

One day as Pat halted at the top of the river-bank, a man, famous for his inquisitive mind, stopped, and asked, "How long have you hauled water for the village, my good man?"

"Tin years, sor."

"Ah! How many loads do you take in a day?"

"From tin to fifteen, sor."

"Ah, yes! Now I have a problem for you. How much water, at this rate, have you hauled in all, sir?"

The driver of the watering-cart jerked his thumb backward toward the river;



Rooster—"Now, then, ladies, do your duty."

he said. "To eat when one is hungry, to sleep well and comfortably, to warm one's self after a day's work in the cold—are not they who have these things often happy enough?"

"No matter how wretched we are, we hold that our lot is not a bad one, and we pity some one worse off. In a storm at sea one night two sailors, their clothing frozen to their bodies, hung to a rope as the waves washed over them.

"I say, Bill," says one.

"Wot is it, mate?" says the other.

"Think o' the poor fellers caught at a picnic in such weather as this."—New York Tribune.

### Got Rattled

One of Senator Depew's stories is about a young man, a native of Peekskill, who just after being ordained returned thither in order that he might take charge of the morning service in the Episcopal church. The young clergyman was exceedingly nervous, and got through the service with difficulty. After the service he said to one of the deacons, "I was pretty nervous, yet I flatter myself that I managed to pull through without a mistake."

"Well, I'll admit that you did first-rate," replied the deacon. "In fact, I'll say that the service couldn't have been better done; but," he added, drily, "this is the first time I've ever known the evening service to be given in the morning."—New York Tribune.



HUGH MORRIS

AWFUL

Mr. Krusty—"What's all that noise?"  
Mrs. Krusty—"Katy is practising 'The First Steps in Music.'"  
Mr. Krusty—"Tell her to take the steps in her stocking-feet."

### Reason for His Faith

Congressman John Sharp Williams tells of a man in Mississippi who is a hypochondriac of the first order. This individual's failing is a source of never-ending amusement to his fellow-townsmen. It was of this man that some one humorously remarked, in answer to a question as to how the sick man was getting on, that "he complained that he

and replied, "All the wather yez don't see there now, sor."—Christian Advocate.

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## The Family Physician

By R. B. HOUSE, M.D.

### A Simple Method for Relieving Neuralgia

THE "Medical Times" calls attention to the observations of Dr. W. C. Belt, originally published in "Health" that if a patient suffering from severe neuralgic pain will simply place the hand opposite the side on which the pain is felt in a basin of very hot water, relief will be had within five minutes.

#### The Reason

A white man attending a Chinese funeral was interested in the queer services, and calling one of the Chinamen aside, he asked, "Why did you leave that duck on the grave? Do you think the dead man will come and eat it?" "Yeppe," replied the Boxer sympathizer, "alle samee as le white deadee man come out and smelle flowers."

#### Be Not Deceived

Let no man deceive himself. The absence of aches and pains, the possession of a good appetite, the ability to sleep well, to work hard and enjoy life without physical activity, is not a state that exists forever. A large inherited bank-account that receives no deposits, but is constantly subject to draft, may stand considerable overdraw, but some day the check returns with this cabalistic phrase across its face, "No funds."

### The Extraction of Foreign Bodies from the Ear

To do this, use a soft rubber tube about the length of a cigarette and of the proper size to be introduced into the ear. The end of the tube is dipped in paraffin, then pushed into the canal until it comes in contact with the foreign body, whereupon the operator, applying his mouth to the free end, aspirates forcibly, at the same time throwing his head backward. Except in cases of angular bodies of irregular contour this method is usually attended by success, the body coming away with the tube. — Medical Press.

#### Ice

The old controversy concerning the purification of water by freezing has again cropped out, and yet it seems that scientific experiments have indubitably shown that freezing does not destroy bacteria. Ice from impure sources is just as dangerous as water. The artificially made ice is without doubt purer than that taken from questionable lakes and streams, but it is the part of wisdom to avoid taking even this into the system. Why buy pure water and then put into it ice whose purity is unknown? Pure water in clean bottles placed next to the ice will be sufficiently satisfactory, and will do away with all risk arising from melted ice.

### Overeating in Old Age

In a paper read before the British Medical Association Doctor Keyworth dealt with the ailments of old age. "It is certain," he said, "that they are largely due to more food being taken than the eliminating organs can get rid of, and a reduction in the amount of food should always be made as maturity glides into senility. If an old man has a good appetite and can digest well, let him have his usual three light meals a day, but as a rule the healthiest old people are the spare eaters. Brain-workers can enjoy a fair degree of health by living on light food which does not require much force to digest or much muscular activity to assimilate. On a diet of well-made bread in variety, vegetables and fruits, with a fair quantity of eggs and milk, very little animal food, many disorders of old age may be avoided and life prolonged. Indigestion denotes not a disease, but an admonition; it means that the individual thus admonished is not taking appropriate food. For inactive and aged persons three fourths of the nutriment matter consumed should be derived from vegetable, cereal and milk produce, and one fourth only from the animal kingdom, and many men of sixty and upward corroborate this statement." The lecturer concluded: "A word about exercise. Long livers have usually been early risers and good walkers. Nothing so effectually promotes the more equable distribution of the blood and averts the constant tendency to local congestion in the brain or abdomen as walking-exercise."

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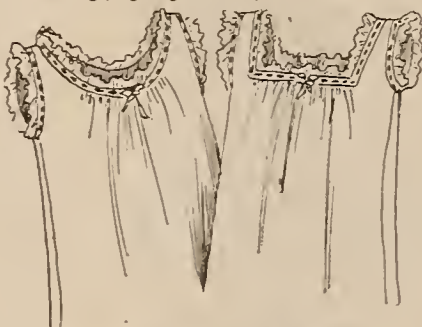
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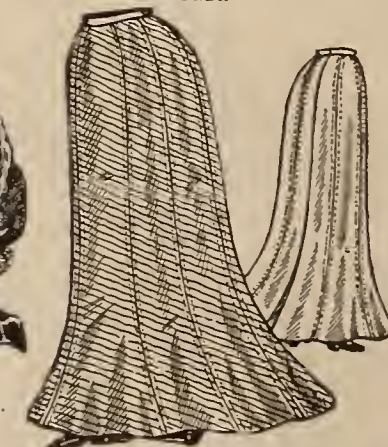
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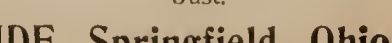


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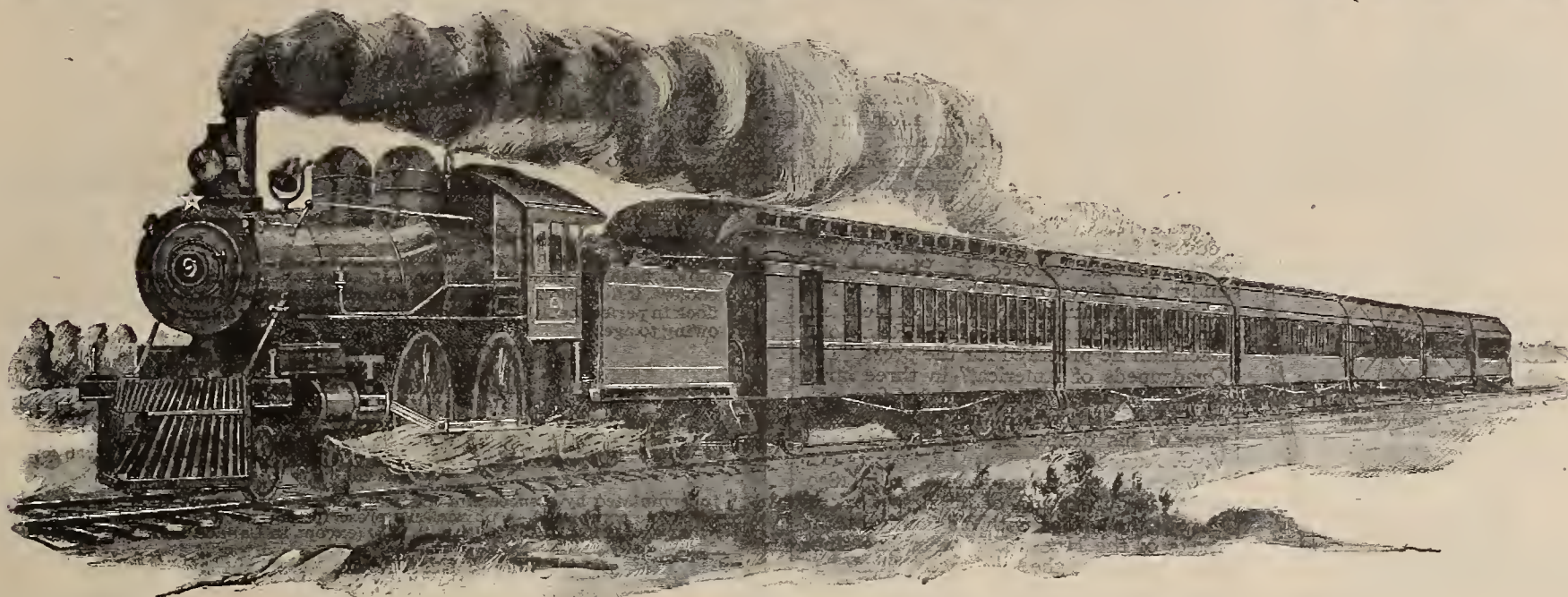
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You will be surprised when the time arrives to see how easily these magnificent trips to the great St. Louis World's Fair were won, and what a very small club, comparatively, it required to secure these prizes. Now, don't think some one has a better chance than you—you have as good a chance as anybody. Don't stop to study over it, but get right out and hustle a little, and you may wake up to find yourself one of the lucky ones. Be quick.

### CONDITIONS

1. Any person can enter this contest.
2. All subscriptions to FARM AND FIRESIDE must be taken at twenty-five cents a year.
3. A liberal cash commission will be paid for each subscription sent in by contestants; this is in addition to the free trips. Get your friends to help you.
4. You must mark each list you send in "World's Fair Contest," so that no mistakes are made in crediting the same to your account.
5. The contest is limited to the United States only.
6. Each successful contestant will have ten days at the Fair during October, all necessary expenses paid from the time they leave home until they return.
7. Contest closes September 15, 1904.
8. In case of a tie, the prize will be one hundred dollars and equally divided.
9. If you don't want to take the trip, you may have the equivalent in cash not to exceed one hundred dollars.
10. Publishers, subscription agencies and wholesale dealers, etc., not permitted to enter this contest.

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Home of "Birds in America"  
[CONTINUED FROM PAGE 1]

He was made a Fellow of the Royal Societies of London and Edinburgh, and a member of the Natural History Society of Paris. With the first volume he obtained one hundred and eighty subscribers at eight hundred dollars each for the work, of which only six were in the United States. The second volume was finished in 1834. This edition contained in all about eight volumes, of which there is a copy in the library of the American Philosophical Society in Philadelphia.

After finishing the publication of these rare plates he commenced the publication of his "Birds in America" in seven imperial volumes, of which the last was issued in 1844. The plates in this edition, reduced from his large illustrations, were engraved and colored in Philadelphia, under the direction of the author. His labors as a naturalist did not cease here, for with the assistance of the Rev. John Bachman he prepared for the press "The Quadrupeds of America," in three large octavo volumes, illustrated by fine colored drawings, which was published the year of his death, in 1851, by his son, V. G. Audubon.

When he returned to America in 1839, after the publication of his first work in Europe, he settled with his family on the banks of the Hudson, in what has since been known as the celebrated "Audubon home near New York City." It was at this beautiful country-seat that he spent the last years of his life, but until the last day of his life he always referred with love and longing to the first home of his early manhood, where the winding Perkiomen threads its way through magnificent hills to join the Schuylkill. His delight in this early home is shown in his charming preface to his "Birds in America," in which he gives the following account of it:


"In Pennsylvania, a beautiful state almost central on the line of our Atlantic shores, my father, in his desire of proving my friend through life, gave me what Americans call a 'beautiful plantation,' refreshed during the summer heats by the waters of the Schuylkill River, and traversed by a creek named Perkiomen. Its fine woodlands, its extensive fields, its hills covered with evergreens, offered many subjects to agreeable studies, with as little concern about the future as if the world had been made for me. My rambles invariably commenced with the break of day, and to return wet with dew and bearing a feathered prize was, and ever will be, the highest enjoyment for which I have been fitted."

While the other homes of the naturalist in this country have been greatly changed—city limits reaching almost up to the door in some cases—this Pennsylvania plantation, on the outskirts of Philadelphia and near historic Valley Forge, has remained practically unchanged for nearly a century and a half. The rambling stone dwelling-house on the hillside, and the quaint old mill in the valley, are the same to-day as when the enthusiastic young naturalist, fresh from his school-studies, established here his first home in America, with his charming girl wife and his infant son, and every allurements of woods and vale for inspiration in his great work. The ancient homestead was built before the place came into Audubon's possession. The date of its erection—1762—appears on a stone high up on the eastern gable. The present owner has enlarged the old stone barn, and at the entrance of the estate, at the foot of the winding country roadway, the massive stone gate-posts bear the name of "Mill-Grove," and a tablet states to the public that this was "The first home in America of John James Audubon." The famous "cave," in which the naturalist delighted to pursue his studies, still stands near the old homestead; the picturesque old mill, in which he took special pleasure, has been treasured for the sake of old associations, although the rumble and clatter of its busy wheels and burr-stones have long been silenced. So far as possible, all the old landmarks have been preserved, and the many sight-seers who to-day visit this first American home of the famous naturalist find it practically the same as it was nearly a century and a half ago.

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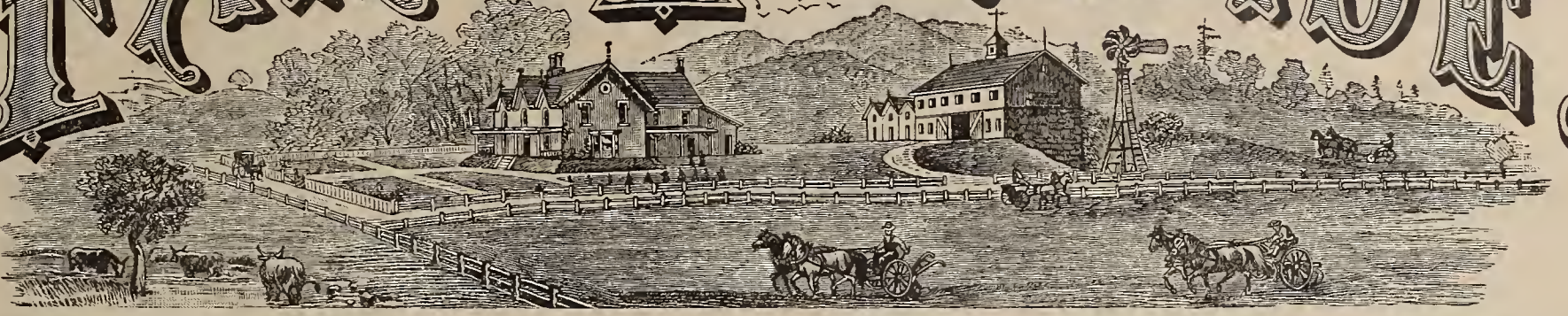
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# FARM AND FIRE RESIDE.



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## The Invasion of Western Canada by American Farmers

By J. OLIVIER CURWOOD

SO VAST have grown the results of the great scheme by which the Dominion government set out to homestead the prairies of western Canada, that it now begins to look as though the policy of the immigration authorities is bound to submerge the native-born population of the Northwest under an absolute flood of good American farmers and ranchmen. During the last year nearly half of the immigrants who settled there were from the United States, and fifty-four thousand of these acknowledged themselves as citizens born and raised south of the border.

That during the next twelve months at least one hundred thousand farmers and cattlemen from the United States will join those who have preceded them there is little doubt, yet in spite of this seeming Americanizing of the Canadian West the Dominion government is proceeding with its colonization plans, with the most absolute confidence that only good will result from them. While many prominent Canadians are beginning to look askance upon the policy of their representatives in Parliament, and to ask if this influx from the republic is not destined to result in the extinction of Canadian individuality, the promoters of the scheme reply calmly that it will be a long time before the American vote in the Northwest will have reached considerable proportions, and that by that time the new citizens and their descendants will have become warmly attached to Canadian and British institutions.

Already, as a result of this policy, there stretches from the boundary northward through Alberta, Assiniboia, Saskatchewan and Athabasca a country nearly

it must be conceded that no other country in the world at the present time offers greater advantages to farmers and cattlemen than this does. The great "trek" into the Canadian West has begun, and it will not cease until those vast stretches of prairie-land are as thickly settled as those Western states of our own which it has taken sixty years to populate.

The immigration authorities at Ottawa have been as shrewd as great generals in planning their campaign. Into that great valley stretching from Michigan and Ohio to the Rockies has been thrown an army of almost four hundred men, commissioned to bring under the flag of Canada every substantial American who can be induced to quit his country. These men are the only visible force in the great scheme. It is their duty to penetrate the farming communities, lecture, and distribute literature. Farmers flock to village meetings to listen to the glowing descriptions of a rich and new country. They are offered one hundred and sixty acres of land free (their own choice in a block a thousand miles square) and railroad fare at one cent a mile if they will live six months each year for three years upon the land. The Canadian government does not say that they must become citizens—it leaves that question for the future. It is impressed upon them that their taxes will be only four or five dollars a year, and that the government builds a school in every community where there are at least eight children, no matter if they are all in one family, and that it pays seventy per cent of the teacher's salary. It is impressed upon them that the government is more than solicitous for the new colonists, and that the

tions of from five thousand to thirteen thousand. No settler needs to carry his crops far, for every few miles along the Canadian Pacific these towns and stations are laid out, and at every place are huge grain-elevators capable of holding from twenty thousand to sixty thousand bushels. These elevators are a mark of railroad enterprise, and are constructed by the Canadian Pacific. Probably eight out of every ten settlers in the neighborhood of the railroad devote themselves to the raising of grain, and during the coming summer it is planned to construct over sixty new elevators. That this is necessary may be seen from the fact that last year the comparatively few farmers of western Canada produced seventy million bushels of wheat, thirty million bushels of oats and over twelve million bushels of barley. Because of the splendid climate and natural productivity of the soil, as high as fifty bushels of wheat are raised from an acre, though the average last year was thirty bushels. This magnificent wheat belt is over one thousand miles long by four hundred miles in width, yet not more than forty or fifty miles of the width are cultivated at all.

Back of this narrow strip, dotted here and there by the herds and flocks of ranchmen, are two hundred and fifty million acres of homestead land that has not yet been taken up. Both Saskatchewan and Assiniboia are better fitted for mixed farming than almost any of our own Western states, yet comparatively little of their ninety-seven million eight hundred and forty thousand acres are now under cultivation. Both of these territories, as well as Alberta, are splendidly



HORSE ROUND-UP AT ELBOW RIVER

a thousand miles square, with a people more generally American than the people of the state of New York. In it are nearly two hundred thousand naturalized and native-born citizens of the United States. Than Alberta and Assiniboia, the two richest and most thickly settled of the Northwestern Territories, there is no state in the Union more Americanized. Following the course of the railroads, one will find the ranches of Alberta settled almost entirely with people from the Dakotas and Minnesota, and between Calgary and Edmonton ninety per cent of the settlers are from the United States.

Regardless of what the possible political importance the Americanizing of the Canadian West may be,

schools are built so that religious services may be held in them, and all at the expense of the government. A great feature of all this is that the promises are fulfilled.

Only those people who were fortunate enough to travel across our own great West half a century ago can fully realize what western Canada is like to-day. They must personally travel over thousands of miles of it, as I have done. The great difference in the comparison is that across Canada there stretches a great railroad, and within twenty miles on each side of this road the great part of the population of settlers lives. Towns have sprung up all along the road, and some of them, like Calgary and Edmonton, possess popula-

watered by rivers and lakes, and are well timbered, perhaps with the exception of western Alberta, which is primarily a grazing country of rolling prairie. Nearly the whole of Assiniboia possesses a soil a little lighter than the deep loam of Manitoba, and produces excellent crops of wheat, coarse grains and vegetables. The whole of this wheat belt seems naturally endowed with all the requirements which combine to make this crop a success, and this accounts for the remarkable yields of grain to the acre in western Canada. The winters are not severe, as many suppose, but on the opposite, the climate all the year round is most ideal. Wheat is brought to maturity with greater rapidity

[CONCLUDED ON PAGE 3]



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## About Rural Affairs

By T. GREINER

**A BIRD IN THE BUSH.** says a wise Solomon, "is worth a hundred birds in the hand." In cherry and berry time many of us have come to the conclusion that a robin in the pot is much to be preferred to a hundred in the tree.

**CLIMBING CURRANT.**—One of our agricultural weeklies considers the name "climbing currant" just as absurd a word-combination as "grape-orange tree" or "pine-oak tree," etc. I can't see the point. In nature almost anything is possible. We have rose-bushes, and we also have climbing roses. Why should it be impossible to develop a currant or gooseberry that would possess a free-trailing habit?

**TREE-BLACKBERRY.**—So long as nurserymen abstain from offering us the "blackberry-tree," and content themselves with cataloguing the "tree-blackberry," we should not criticize them too severely. The name simply suggests a blackberry-bush of such strong and upright growth as to (perhaps faintly) remind one of a tree. But a catalogue-maker should also abstain from accompanying the descriptions of the tree-blackberry with pictures which represent a real blackberry-tree. Up to the present this exists in imagination only.

**A SPECIALTY OF SOME KIND** is a good thing for any farmer. It gives him a special interest in his work. This is an age of specialties. Life is too short and things too complicated to learn everything about every crop or stock that one can raise. By selecting one especially promising thing—may this be strawberries, plums, poultry or pigs—the subject can be studied up in all its details and bearings, and the greatest perfection in that line may be reached. This is and will be more profitable than mediocrity in all lines. The specialty, well followed, is apt to give a name and success.

**THE DEVELOPMENT OF APPLES AND PEARS** depends perhaps more on the amount of moisture in the soil during the period when the fruits are filling out than on any other one thing. The past summer and fall we had plenty of rain, and therefore soil-moisture; and how those Bartletts and the later pears and all the apples did swell out! Finer fruit was never seen, even where trees stand in sod. If the season had been as dry as we often have it, the specimens would probably not have reached more than half the size they did obtain, and less perfection, and the difference between the crops in cultivated and neglected orchards would have been far greater, of course in favor of the cultivated.

**THE GINSENG BUSINESS.**—Prof. L. A. Clinton, director of Storrs Agricultural Experiment Station, warns the farmers of the state against overconfidence in the ginseng business and ginseng profits. Some few, he says, have made money in ginseng; but for one man who has made money, one hundred have lost all the money they put into it. The wonderful profits which the ginseng-boomers have been figuring out as possible to be made on an acre of ground are good theoretically, but are never realized in practice. The paragraph hereafter quoted lets a full stream of light upon this mysterious, and to many persons alluring, subject. Mr. Clinton says: "I have investigated carefully the ginseng industry in central New York, having visited many gardens, and I am certain there is no profit whatever for the ordinary farmer. If one desires to purchase a few ginseng-seeds, or better yet a few ginseng-roots, to experiment with, he will probably re-

ceive information enough to pay him for the money expended; but he should not be disappointed if he receives no returns from his investment, and he should charge up the money spent as tuition for his education. Let the other fellow make the profit on ginseng."

**USES OF CRUDE PETROLEUM.**—In one sense the San Jose scale has been a blessing to me. Without its coming I would have known nothing about the general usefulness of crude petroleum, which was procured merely as a means to fight the new scale. Hereafter I shall always try to keep a few gallons on hand, although it costs me twelve cents a gallon by the barrel, or as much as good kerosene. We have sprayed it freely on the hen-roosts—in fact, over the entire interior of the poultry-house, including the nests, and the droppings under the perches. We have also sprayed it over the interior of the pig-pen, including even the pigs themselves. Before this we have had our pigs infested with lice, and shall try to keep them free from vermin this year by means of an occasional petroleum spray. The crude oil is also useful for softening old leather, oiling harness, shoes, the woodwork of old tools that are left outdoors part of the time, etc.—in short, we have use for it right along. The question will only be where to get it unless you buy it by the barrel, as we do, and any farmer can afford to do that rather than be without it. It is one of the best and cheapest of wood-preservatives.

**TESTING SEED-CORN.**—The warning of the Ohio Experiment Station against the uncertain germinative powers of the corn grown last year is timely, and should be heeded. We had a fairly good corn crop, and harvested it in as good shape, apparently, as we usually bring it under shelter, but the early and severe cold weather coming before the grains were thoroughly dried out has surely hurt the seed to such an extent that only a comparatively small per cent of it will grow—we can tell that much by the looks of it. If we desire to have a full stand in our corn-fields this year we must use a much larger quantity of seed than we do in average years. The method of testing seed-corn recommended by the Ohio station is as follows: Place a fair sample between sheets of moist paper or cloth, and put this into a box of suitable size. Several lots may be tested at once, and examined much more easily and quickly, says the station in Bulletin No. 256, than when planted in sand. Simply keep the paper moist, and where the temperature does not fall below fifty-five degrees. It should all germinate in from four to eight days, depending upon the temperature. Any test, however, will do well enough. I have often planted samples in flower-pots in sand. All that we need care about is to have some idea about how much of the corn will germinate, so as to determine how much seed to plant. Too much is better than not enough, for it is quite easy to hoe out a few plants where too many have come up in the hill.

**A NEW WASH FOR SCALE.**—Liver of sulphur (or potassium sulphide) and lime, made into a wash or spray-liquid, is being spoken of as a promising remedy for the San Jose scale. It is easily made. First dissolve the liver of sulphur in boiling water (say a quart of water to a pound of the drug). This can be done in an old iron kettle. Slake an equal quantity (by weight) of good stone-lime in another vessel, preferably a clean barrel, by adding hot water gradually and slowly. While the lime is slaking, pour the liver-of-sulphur solution, boiling-hot, over the lime, and stir the whole thoroughly, adding what water is needed to make the complete mixture. Finally strain the liquid into the sprayer, and apply to the trees or bushes. This mixture has the one advantage that it can be quickly prepared in large or small quantities. How effective it is, both as an insecticide and fungicide, remains to be tested. I can see no reason why it should not do good work. But it has two disadvantages: It is not cheap. Liver of sulphur will cost about fifteen cents a pound even at wholesale, and it will take a pound of it and a pound of lime to make two gallons of the wash. The latter is also strongly corrosive. In spraying we must wear old clothes (of course, we always do this, no matter what spraying-material we use) and try to protect the skin of the hands and face by coating it freely with vaseline. When done spraying, sponge the face and hands with weak vinegar or lemon-juice, to get rid of the lime before washing with soap.

**NEW USES FOR THE BORDEAUX MIXTURE.**—For years we have been trying to get rid of the Bordeaux mixture, thinking that scientific research should lead to some better, more easily prepared and more conveniently applied remedy for plant-diseases than the old mixture of copper sulphate and lime, upon which some layman stumbled by mere accident. Thus far, however, this mixture has shown remarkable staying-qualities. Whenever some one asks for a remedy for some plant-disease, the answer, in nine cases out of ten, is sure to be, "Bordeaux mixture." And now this "nasty" compound seems to be ready to render us other important services. Paragraphs in almost every daily paper have been telling of the discovery of the agricultural department that the Bordeaux mixture makes short work with typhoid-fever germs, and also with mosquito-larvæ. As everybody who has used the mixture knows, the lime and copper in the liquid will soon settle to the bottom when at rest, leaving the water as clear as crystal on top. It is possible that this water, taken without disturbing the sediment, might be harmless if taken into the stomach. But as it takes only a very small quantity of Bordeaux mixture to kill typhoid-fever germs, it may be feasible to disinfect even city water by these means, and then after filtering get as the result a perfectly safe drinking-water. For mosquitoes, the Bordeaux mixture will undoubtedly prove a real blessing. Sprayed over stagnant waters, even in small quantities (and therefore in inexpensive applications), it is claimed to kill the algae which furnish the chief food of the "wrigglers," and cause all such vegetable matter to go to the bottom with the sediment, leaving the clear water on top. The wrigglers will then die from starvation. It is to be hoped that the Bordeaux mixture will accomplish all that we now are led to expect from it.

## Salient Farm Notes

By FRED GRUNDY

**THIS IS THE SORT OF SEASON** that nitrate of soda can be used to advantage on many crops. When a crop is belated by a backward season it is good policy to hurry it as much as possible, and a light application of nitrate in May makes a large difference in the growth and final outcome of the crop, especially in heavy soils that have remained cold until late. A good farmer told me yesterday that he believes thorough cultivation is better than nitrate for hurrying a crop forward. Probably this is true in his case, because his soil is already rich, and kept filled with humus by a four-year clover-rotation. It will take skilful and timely work to get and keep heavy soil in friable condition this season. One must plow just when the soil is passing from wet to dry, and harrow well before it bakes. Then in cultivating young corn on such soil the narrowest shovels to be had should be used, and the cultivation should be repeated as often as a team can pass over the field. One must get the soil as friable as possible before the corn-roots get out very far. I have seen the heaviest soils made as loose as a bed of ashes by oft-repeated cultivation with very narrow shovels.

**OATS.**—"Young Farmer" writes a long letter, giving his experience with oats last season. He says he thinks they make splendid feed for both horses and cows, and he would like to keep about a dozen loads in the sheaf for that purpose if it could be done. Last year he put them in a hay-loft, and mice fairly riddled them. He says he believes there was a million mice in that loft. If he stacks them outside, mice will get into the stacks and work almost as much havoc as in the hay-mow. There seems to be no way of keeping mice out of sheaf oats, and I think it will pay him to have them threshed, the grain stored in a bin, and the straw in the hay-mow. Horses will eat about as much of the straw after it is threshed as they will in the sheaf, but I have never seen well-fed cows that would. He says he will have no hay next winter unless he buys some, and he does not want to do that. If he cuts plenty of corn, he will be pretty well fixed for roughness without any hay. I would feed the oat straw to the horses, and corn fodder to the cows. It might be a good idea to buy a load of hay to mix with the straw fed to the horses next spring when at hard work, but I would not buy a pound for winter feed. He also asks if I would advise him to grow some sweet corn to cut for fodder for his milk-cows. I would not. I never have been able to make good fodder of sweet corn. It will mold in the shock, or if stored in a dry shed. As a feed for milk-cows when pastures begin to get short along in August it cannot be excelled, but it is no good for dry fodder.

**CHERRY-TREES.**—A woman living in Indiana says that two years ago she bought a few cherry-trees, and planted them in a group back of the house. They were very small, and are branched almost to the ground. She says they look more like bushes than trees, and she is advised by her neighbors to trim them up or they never will bear fruit. She wants to know if this is good advice. If I had my cherry-trees to grow over again I would make them branch within a foot of the ground. I supposed it was the proper thing to trim them up and make them look like trees—trim them up so I could walk under their spreading branches without knocking my hat off. Now when I gather cherries from them I have to ascend a long ladder. To get those large, juicy ones that grow on the ends of the branches I must stand on the top of a tall, shaky step-ladder. Now I see the folly of sending the tree away up into midair. I might just as well have had those cherries ten feet nearer the ground. My Japan plums are away up like the cherries, and I have a risky time gathering them. I would advise this lady and everybody else to head their cherry and plum trees just as low as possible. Cut them back when you set them out, and induce the branches to come out close to the ground. You may just as well have the head of the tree low down as to have it away up on top of a bare stem. I would treat pears in the same way.

**CELERY.**—One vegetable that very few farmers attempt to grow is celery. They seem to think that it can be grown only in favored localities, or that there is some mystery connected with the growing of it that only expert gardeners can understand. I know some farmers who buy as much as ten dollars' worth at the stores every year who could grow at least twice as much as they buy, and at a cost of not to exceed one dollar. A neighbor of mine is very successful in growing it. He is very fond of it, and every year he grows a full supply for himself, and also sells quite a lot to neighbors who go to him for it. He grows his own plants for seed, but he advises all who are rushed with work to buy their plants from some one who understands growing them. For his main crop he sets the plants out about the middle of May. The soil is worked over in the evening, and the plants are set about six inches apart in rows two feet apart, being well watered as they are set. If the weather is warm and inclined to be dry he covers the plants lightly with straw, removing it the following evening, when the plants are again well watered. I shade the plants for two or three days with boards. Celery seems to be slow about taking hold on the soil, and the plants must be protected from the sun and kept well watered until they become established. Getting the plants fairly started is more than half the battle. After that all that is necessary is to keep the soil mellow. If the soil is rich, as it should be, the plants will be ready for blanching early in September. I blanch with four-inch drain-tile, and also with twelve-inch boards set on edge against either side of the rows and tacked about two inches apart at the top with bits of board. Try a hundred plants this season.



## Farm Theory and Practice

## THE ANGORA GOAT.

There are fads in agriculture, just as there are in every other department of the world's work. It may be ginseng, Belgian hares, Angora goats, or any one of a score of other things. The Maine station prints some notes of its experience with Angora goats that presents their true worth in an accurate way. The station was attracted by the claims made for their helpfulness in clearing wooded areas, and purchased six does and a registered buck. During the winter they were fed in the barn on hay, and this care was not sufficient to successfully build up the flock. At the end of two years the flock had increased from seven to fourteen. During the first summer the goats were pastured in young woodland fenced with ordinary woven-wire fencing. They persisted in putting their heads through the meshes and becoming imprisoned, and they would walk up the braces of the end fence-posts and jump down on the other side. The result was that little was learned that season of their work in clearing up land. The second season a woven-wire fence fifty-eight inches high held them. They ate the leaves and sprigs of young bushes in preference to the grass. The small underbrush of birch, maple, hazel-bush, etc., was cleaned up. They are especially fond of the bark of the maple, killing trees six inches in diameter. The fleeces average three pounds each. The carcasses are small, and there is no market in the East for the flesh. It requires about seven hundred and fifty pounds of hay to winter one goat. They are quite hardy and thrifty.

These notes help us to a safer knowledge of the value of the Angora goat than was obtained from the enthusiastic publications of the United States Department of Agriculture. They classed this goat "among the most useful of the domestic animals," enlarging upon the value of the fleece and the flesh. The facts are that the average so-called Angora goat of the United States is valuable for browsing when kept under control, and gives a clip worth something less than that of a common sheep.

**MACARONI WHEAT.**—Agriculture in the Northwest is new. There is a climate and a soil not favorable to some of the staples of the older farming sections of this country. Nowhere is there greater opportunity for the extension of aid to practical farmers by experiment stations and other agricultural agencies. The United States Department of Agriculture is doing some of its best work for the semi-arid regions. The introduction of new varieties of plants is the leading feature. The Eastern farmer may wonder at the emphasis placed upon the value of "Bromus inermis," macaroni wheat, etc., but many such new varieties of plants are proving a boon to the farmer on the light, dry soils of our Western country.

Macaroni wheat is adapted to growth in sections of light rainfall. West of the Red River Valley, in the Dakotas and Montana, experience shows that the macaroni wheats will make good yields. The grain is rich in protein, the muscle-making element, and makes good yields to the acre. It does not contain as much starch as common wheat, and therefore does not make a desirable flour for bread. The leading use of the flour is for making macaroni, and soon it will be no longer necessary to import this article of diet. An excess above this demand can be used in the making of muffins, griddle-cakes and similar foods for human consumption, and in the feeding of live stock.

**A NEW POTATO-DISEASE.**—Potato-production has always been limited by the prevalence of diseases. The late blight that induces rot has been one of the most effective agents in restricting production, and is the one most feared by Northern growers. But there is a disease comparatively new to this country that gives promise of doing extensive damage unless effective checks are employed. This disease is known as "Rhizoctonia," and attacks many kinds of plants. On the potato it is now known as the rosette disease, the name being suggested by the appearance of the leaves when the fungus in the stem checks the flow of sap. It is not entirely new, having been noticed in Colorado potato-fields in 1890, and in 1900 observations were made in Ohio and New York, where some fields were nearly ruined. The seed-tubers are a source of infection, carrying the germs from infected soil to the new soil in which they may be planted. Professor Selby says that the "prevalence of rosette in early potatoes grown in Ohio the past season may be summed up as universal." It is my own observation that the disease may secure a lodgment in a field of apparently thrifty plants, and then have its effect counteracted by a change of weather. I have seen one field go down under an attack so that the crop was nearly worthless, while in another year the rosette appearance was thrown off by most of the plants, and a big yield was secured. There is yet much to be learned about this soil-disease that is threatening the potato over large areas. The disease-germs may be in the soil, or only on the seed that is to be planted. If in the soil, it is wise to change the crop-rotation; if the germs are on the seed, a fair degree of immunity may be secured by immersing the seed for two hours in a solution made by putting one pint of formalin in thirty gallons of water. Such treatment is needed anyway to kill the germs of other diseases, such as scab, and if no untreated seeds were planted,

## All Over the Farm

there would be better control of several fungus enemies of the potato. We are rapidly approaching a time when we must wage continuous warfare on the fungi that attack our cultivated plants, and seed-treatment is one of the important features of such a control.

DAVID.

## Compressed-Germ Cakes

Ours is surely the age of concentration as well as centralization. Beginning with the evaporation and compression of food products, as fruits, vegetables, eggs, soups, yeasts, drinks and medicines into cakes or tablets which will fill or physic while we wait by simply supplying moisture and giving room to swell, now come fertility tablets of compressed germs, which the husbandman may carry in his watch-pocket as he moves over his broad acres, when, by the insertion of a minute disk or dice of germ-rising into a bean-hill, he may release and set at work myriads of farm-helpers, diminutive in size, but veritable giants when judged by their ability to gather and store fertility from the air. The vast envelope of atmosphere all about us which gives us the breath of life is four fifths plant-food, or nitrogen, yet so hard to get and convert into available form for plant use. The plants may be literally starving and dying for this fertility element, though surrounded by this atmospheric sea of it.

To Professor Nobbe, a German scientist, we owe no small debt for his investigations and experimentation of the nitrogen problem. While some of his demonstrations are not new—as the evidence that some plants, particularly the legumes, have the power to assimilate or snare the nitrogen of the air, and convert it into available form, as nodules upon their roots—yet he has gone further, and has shown that the nodules are formed by bacteria called "radicola."

Professor Nobbe's investigations have also proved that certain plants, as the lupines, containing the root-nodules would grow in soil devoid of nitrogen, whereas without the nodules they would die. Then, by artificially propagating these nodule-germs in a preparation of gelatine, he could soon multiply them at will into millions. By continued experiment he found that these germs could be changed into germ-specialists which would be particularly adapted to promote the development of distinct plants, as clover germs, corn germs, straw germs, berry germs, etc. The propagated germs the Professor has been distributing among European farmers in the form of bottled bacteria for the purpose of making tests. Now our Uncle Samuel has gone him one better by preparing to send out compressed-germ crop-stimulators in tablet form, or to put it differently, soil-inoculators. It is too soon to bank on results, of course; but judging from Professor Nobbe's convincing experiments, coupled with others of like nature from other sources, it is not too much to expect that the atmospheric storehouse of nitrogen will soon be on tap for all progressive, painstaking farmers. B. F. W. THORPE.

## The Invasion of Western Canada by American Farmers

[CONTINUED FROM PAGE 1]

than further south, because on account of its northern latitude it receives more sunshine during the period of growth than does that of the United States. Absence of rust and insect foes add to the quality of the grain.



FARM HOME OF SETTLER THREE YEARS IN ASSINIBOIA

But while just now it is quite the fashion to speak of western Canada as "the coming granary of the world," it is apparent to the man who travels across the territories that those vast regions are ideally fitted for general farming, and now and then in going from settlement to settlement one will come across homes surrounded by laden fruit-trees, and occasionally across a homestead where the owner is devoting his whole time to the raising of fruits. There is one place like this near Calgary, and when I asked the proprietor how he expected to market his fruit, he replied, "I don't care whether I market it or not. As a matter of fact, there is a bigger demand for fruit in these western Canadian towns than in the city of New York. But what I am after are trees, sir, trees and vines, for it won't be another year before there'll be a tremendous demand for them." I would not be surprised if this man made a fortune from his enterprise.

At present hundreds of ranchmen and sheep-raisers are flocking into the western territories from Idaho, Montana and Dakota. I recently spent several months in the vicinity of the border, and made the acquaint-

tance of a score of different ranches in the embryo, as it were. These men usually combine in taking up the homestead land, and secure a whole section. Without waiting for the erection of buildings, they drive their flocks and herds over, and erect homes afterward. At present there are more than two hundred and fifty thousand head of cattle in Alberta alone, and two thirds as many sheep. In this country both sheep and cattle can range throughout the winter, and find good grazing during every month in the year. Cattle are now in such demand that the profits of ranchmen are very large, and from forty dollars to fifty dollars a head is cheerfully paid for steers.

The social conditions in western Canada are extremely interesting. The prairies are crossed by trails and roads, but neighbors, except in certain localities, are usually from half a mile to a mile apart, and sometimes three or four. The country resembles the Old South, in that horseback-riding and fox-hunts are two of the pastimes in which the colonists indulge; and it strikes one as a novel sight to see American farmers out on the prairies playing polo, yet this is a game as popular among the new farmers of western Canada as base-ball is among those of the United States.

## Notes and Comment

The "Manufacturers' Record" believes that cotton should, under ordinary conditions, average about ten cents a pound.

The production of grain crops on humus-exhausted soils rarely pays the cost of producing them. It is probable that if an accurate account were kept with many fields the fact would be made apparent that the tenant-farmer could better have afforded to work as a farm-laborer at the usual price than to farm poor land.

Seed of any named variety, however good, will deteriorate unless a continued selection of seed is made from those plants which are the nearest approach to the standard of perfection. Aim, therefore, to purchase and plant plump seeds which are the product of vigorous plants that are uniformly true to a desired type.

Professor Carlyle, of Colorado, says, "We don't need corn to make the highest-priced bacon. Barley and oats are better. Corn makes soft pork that will not take the salt to make the nice quality of bacon which the English market demands, and which brings from three to four cents more a pound than the best corn-fed product."

No boy should be expected to engage in farming without some assurance that it will pay as a business enterprise. The want of an accurate knowledge of the actual cost of a bushel of grain, a pound of pork, beef, wool, butter or other farm products is enough to deter any one from engaging in a business so generally managed on the guesswork plan.

The tendency to cease dealing with non-bonded, irresponsible, perambulating agents is on the increase. While it is true that all agents cannot be wholly dispensed with, it is equally true that the number could be advantageously decreased. Direct dealing, without the intervention of an unnecessary number of middlemen, is rapidly becoming the up-to-date way of doing business.

The potato-growers in the vicinity of Greeley, Col., where irrigation is practised, and where extraordinary yields are common, have found a competitor in the vicinity of Sheridan, Wyo. The offer of a prize of one thousand dollars by an enterprising publisher for the largest yield of potatoes on a measured acre resulted in the production of nine hundred and seventy-six bushels. The offer to repeat the contest was not accepted by the Greeley potato-growers.

As wheat-growers it is not to our interest to look upon matters in the Far East with indifference, for as President Hill of the Northern Pacific Railroad says, "If we could but sell these Orientals one bushel per capita (each) it would take four hundred and fifty million bushels to supply China and Japan alone." He further said that "an increase in our exports of fifty million bushels would doubtless advance the price of wheat we send to Europe from ten to twenty cents."

The best authorities on cold-storage houses agree that if fresh eggs are stored where an even temperature of thirty-one degrees Fahrenheit is maintained they can be safely kept from the spring months until the following December and January. Also, that when fresh butter of the best quality is kept at a temperature of from five to ten degrees above zero it can be kept a long time without any appreciable injury. There is said to be a rapid increase in the number of cold-storage houses, of which nearly two thirds are being used for the storage of fruit. Those having a capacity of from three thousand to five thousand barrels seem to be particularly well adapted to towns having a population of from four to five thousand which are located in the leading fruit-growing sections. Holding fruit in this way, and keeping a close watch of the best markets, will tend to lessen the liability of glutting an already crowded market.



## Gardening

By T. GREINER

**H**AIL TO THE DANDELION, the earliest of our spring vegetables, so easily grown, so wholesome, so gratifying! We have them wild in abundance, yet how much nicer, cleaner, more easily prepared and generally more satisfactory are the plants from the cultivated patch in the garden! When you sow seed, always select a spot where the plants may remain until along in next spring, say alongside of the asparagus or the parsnips and salsify.

**THE BUNCH-ONIONS.**—Later developments prove most of the onion varieties grown from seed last summer badly hurt by the unexpected dips of the mercury to about fifteen degrees in the middle of April, after the plants had passed the ordeal of the severe winter all right. Only the White Portugal and the White Queen (Barletta?) escaped unscathed. This proves the entire hardness of the two sorts. A good portion of the Prizetakers are good yet. The latter makes such fine sweet green onions that we can well afford to take some risks or to plant a patch even if we do lose a percentage by an unusually trying winter.

**SULPHUR FOR RADISH-MAGGOTS.**—Mrs. M. H. B., of Carrollton, Ohio, writes: "Tell all your subscribers, when they sow radish-seed, to sprinkle sulphur either before the seed is put in or before it is covered, and they will find that they can have all the radishes without maggots that they want. There is not much danger of overdoing the thing. Apply enough so that the ground will look pretty well colored. I always use a little sulphur on peas and beans, also, and think it keeps cutworms away. If you don't believe my story, just try a row of radishes without the sulphur, and note the difference." This remedy is easily tried. One of my neighbors, and in fact a good many other gardeners, always sprinkle salt along the rows with the radish-seed, and think it keeps the maggots away.

**GOOD WINTER SQUASH.**—I like a nice dry winter squash, such as the old Hubbard used to be. In recent years, however, my Hubbards were usually watery, and almost worthless for table use. Whether the fault is in the Hubbard itself, it having degenerated, or in the manner of growing it, I am not prepared to say. Now and then I find a squash that cooks dry and mealy, as of old; but even when I gather seed of such specimens, and plant it, I again get watery, flavorless things. Possibly the squashes would be better on soil of a more sandy character. Many other vegetables, notably sweet corn and melons, seem to have a better flavor when grown on sandy soil. In short, so far as winter squashes are concerned, I am "in a pickle." I have tried the little Coconut squash just for quality, without having better success. Before giving up, however, I must try the Delicious. If that does not give me the old-fashioned dry and mealy squash I shall have to quit.

**MANURE FOR SWEET POTATOES.**—A reader in North Carolina has a lot of chip-dirt and wood-ashes which he desires to use in combination with "guano" for his sweet potatoes. The sweet potato is the one crop above all others for which I would apply manure in the hill. For almost all others I prefer broadcast manuring. The ground should not be excessively rich. We don't want an excessive growth of vine, and these rooting all over the surface of the ground. For hill manuring you might make a combination about as follows: Two hundred and fifty to three hundred pounds of fresh (or five hundred pounds or over of leached) wood-ashes, one hundred pounds of acid phosphate and what chip-dirt you desire to add. The latter is of comparatively little value as plant-food, but may have a good mechanical effect—making the soil loose and porous. It may be supposed that your soil has nitrogen enough for the crop. Apply a fair dose of the mixture (enough to use several hundred pounds of acid phosphate to the acre) right in the hill, mixing it well with the soil, and trust to Providence and good cultivation, especially the latter. The term "guano" is used by many people to denote any kind of concentrated commercial fertilizer, just as the term "phosphate" is often used.

**HORSE-LABOR IN ONION-FIELD.**—R. M. B., of Marengo, Ill., asks whether onions can be planted so that they may be worked, in part at least, by horse-labor. I usually make the rows for my onions from twelve to fourteen, or at most sixteen, inches apart, preferring to work them mainly with the hand wheel-hoe. This appears to me so little trouble, and allows of so much better work, especially in running the weed-cutting blades close up to the plants, and thus reducing the labor of hand-weeding to a minimum, that I have never been able to see any advantage in using a horse for the purpose of furnishing motive power, except in so far as it serves to stir the soil between the rows to a greater depth, with possibly greater effect in preserving moisture. Editor Collingwood of the "Rural New-Yorker" makes the rows for his Prizetaker plants two feet apart, cultivating with a horse. With him, on his sandy soil and with usual dry seasons, the preservation of moisture is one of the most essential conditions of success. He writes me, however, that his crop last year was at the rate of about six hundred and twenty bushels to the acre, and the returns not far from four hundred and fifty dollars an acre. One who has plenty of land and no reason to crowd his onions can well have the rows far enough apart for horse cultivation.

**DRAINAGE AND LIME.**—A. J. W., of Fall River, Mass., says he has a garden, soil rather heavy and somewhat wet in spring, underlaid with clay at a depth of eighteen inches or two feet. Stable manure has been used each year, yet the crops seem to be grad-

ually failing. Pumpkin, melon and cucumber vines usually come up all right, but soon die, and are always a failure. Corn and peas do not succeed very well, while string-beans and tomatoes do fairly well. He let the land "rest" once for three or four years, but without securing much improvement. I am rather suspicious that this soil is sour, which can be easily determined by pressing a strip of blue litmus-paper between two fresh, moist slices of the soil, leaving it there for a minute or two. If the paper turns to a pinkish color, the soil is acid, and will need sweetening in order to be brought back into good productive condition. Many of our garden crops utterly refuse to grow in acid soil. The first thing I would recommend for this garden-spot is thorough under-drainage, to remove any excess of soil-water and to improve the texture or other physical conditions. This alone may restore the spot to usefulness and productiveness, but if it is rather acid I would also apply liberal dressings of lime—enough, at any rate, to sweeten the soil sufficiently so that the blue litmus-paper will retain its blue color on coming in contact with it.

**SUGAR-BEETS FOR STOCK.**—A reader in Elcho, Wis., intends to plant sugar-beets for stock, rather than mangels, but does not feel quite sure whether he should plant them in drills, or in hills about nine inches apart. His garden-drill can easily be set to sow them either way. I am very much disinclined to recommend growing sugar-beets for stock. They are richer than mangels, it is true, but I usually grow only half as many bushels to the acre as I can produce mangels, or even less, and the fattening properties of the sugar in these beets are easily and cheaply secured from corn or corn products. The reason I grow mangels for stock is to get the largest possible bulk—the succulence, or you may call it water, that comes so acceptable to cattle in the long days of dry feeding. I want the appetizer more than the nutriment. Nothing will provide the mere matter of food more cheaply and easily under most circumstances than corn in grain and roughage, bran and oil-meal. The beets serve really an altogether different purpose. For that purpose I want simply the largest possible bulk. Instead of sugar-beets, of which one can grow fifteen or twenty, and in favorable cases perhaps up to twenty-five or thirty, tons to the acre, I prefer to plant the large mangel varieties—Mammoth Red, Gatepost, Jumbo, Yellow Tankard, Yellow Ovid, Globe, etc.—and grow forty or fifty tons and upward an acre. It does not take a large piece of fairly good garden-land to produce the two or three hundred bushels of mangels which are all that is required to supply two or three cows with plenty of appetizer during the entire closed season. It is true that we have good enough drills that will drop in hills, and theoretically it would be a great saving in labor of thinning to have the plants come up in little bunches just nine inches or a foot apart. Practically, I find it just as well, and in fact prefer, to have the plants come up from seed sown in drills. It means less vacant spots, and no more labor in thinning if that is promptly attended to. But try them both ways, by all means.

## Fruit-Growing

By S. B. GREEN

**P**RUNING CHERRY-TREES.—J. A. J., Minooka, Ill. Cherry-trees need but little pruning, and as a rule do best where they are pruned only just enough to keep them in good form. Further than this it is not desirable to go. This practically means that cherry-trees should be pruned but very little.

**BUDDING LEMON-TREES.**—L. H., Uniontown, W. Va. The seedling lemon and orange trees that are commonly grown will not fruit until they are quite old. I have known of seedling oranges to be twenty years old before they fruited. On this account it is desirable to bud them with some of the early flowering kinds. This may be done at any time of the year when the bark will peel and when buds can be obtained that are of good size. The operation of budding lemon-trees is much the same as that of budding other fruits.

**SCURFY SCALE.**—P. F. G., Ashtabula, Ohio. The cuttings which you inclosed are badly infested with what is known as scurfy scale. While this is not an especially troublesome pest, yet when it becomes very numerous it may seriously injure the growth of trees. However, it is quite easily destroyed by washing the tree in winter with a strong solution of potash lye. After the leaves are started there is little that can be done to prevent its ravages. I would suggest, however, that you spray the tree with strong soap-suds, and apply a good coat of whitewash to the limbs, especially to the trunk and the larger branches.

**UNFRUITFUL MULBERRY.**—G. W., Ancrain, N. Y. It is not at all uncommon for mulberry-trees to be barren when growing alone. It should be known that some mulberry-trees have all staminate, and others all pistillate, flowers, and others both kinds of flowers. The chances are that were other mulberry-trees growing in your vicinity that this one would be fruitful. On the other hand, it is possible it would not be fruitful under any conditions. I quite agree with you that the best treatment for black-knot on plum is to cut it out and treat the wound with some antiseptic. For this purpose thick Bordeaux mixture is excellent.

**GRAPE-PRUNING.**—R. A. H., Stuttgart, Ark. The best time to prune grapes is on warm days during the latter part of the winter. By the time this reaches you it will be too late in your section for any severe pruning this year, and it is probably best for you to confine your grape-pruning to simply shortening back the new growth and keeping the vines within bounds, and next season begin in time and give it the necessary pruning. It would be quite out of the question within

the limits of these columns to give you the directions which you wish on pruning grapes and fruit-trees, but there is a little book on that subject, called "The Pruning Book," published by The MacMillan Company, New York City, that would be very serviceable to you, and it would be well worth your while to get it.

**EGGS OF KATYDID—PRUNING.**—W. J. B., Danville, Ill. The peach twig which you inclosed has on it the eggs of the common katydid, which are not to be especially feared.—It is a difficult matter to give directions for pruning an old orchard to one who is not acquainted with the general subject of pruning, and I fear it will be pretty late when you get this reply to do anything in the way of satisfactory pruning this spring. If the trees are unhealthy, the lack of pruning is probably not responsible for it, but the weakness is very likely due to insect pests or to the lack of good cultivation and fertilizing of the soil. The best time for general pruning is in June, about the time that the trees are in full leaf. I do not like to do heavy pruning at that time of the year, but moderate pruning can then be done to the best advantage.

**GOOSEBERRY-WORM.**—M. E. P., Waldo, Oreg. The gooseberry-worm, which seems to be the insect that is causing you serious trouble, is quite difficult to destroy. The eggs are laid on the surface of the berry, and later are hatched, and the worm eats into the center of the fruit, where it undergoes its changes, and finally emerges as a small brown moth. On this account there is no satisfactory insecticide that can be applied, and the only remedy is to remove and destroy the infested fruits while the worms are in them; but this may sometimes be useless where your neighbors have gooseberries, and do not go to the same trouble, since the mature insects would go from their places to yours. The only satisfactory way to get rid of a pest like this is for neighbors to combine and make a thorough work of removing the infested fruit, which is easily detected by its peculiar color. Some study should be made also as to whether this insect grows in any of your native fruits, for it is quite possible that the native fruits may furnish enough supply to destroy the cultivated kinds. I would suggest that you correspond with your experiment station at Corvallis, Oreg., who will be pleased to advise you.

**PLUM-GRAFTS—COMPASS CHERRY—LENGTH OF SCIONS—SCIONS FROM COLD STORAGE.**—J. V., Lakeland, Wis. There is no question but that plum-grafts may be successfully made up without wax, but in my experience I have found it desirable to carefully wax all my grafts, and I have excellent success. I always prefer, however, to graft small stocks below the ground, and to cover the union with soil. For plums I do not like scions that have been kept in the cellar as well as those that are cut at the time the grafting is done.—The Compass cherry will do very well upon the Americana plum stock. The Compass cherry is a hybrid between the sand-cherry and the native Americana plum. On this account it has no true botanical name, in the ordinary sense. It is of very inferior quality, but is productive wherever plum-rot is not seriously injurious.—I think that scions four to six inches long are long enough, and should not use any longer unless it was to get the union deeper in the ground.—I can see no special objection to using scions kept in cold storage, but before doing so I should want to make some cross-sections of the buds to be sure they were in good condition, as they are liable to be injured in winter.

**BEST WILLOW FOR WIND-BREAK—GROWTH OF ELM SEEDLINGS—AMOUR BARBERRY—DIAMOND WILLOW—ARBOR-VITÆ—MANURE ABOUT TREES—DISTANCE BETWEEN WILLOW CUTTINGS—LARCHES.**—G. H., Annandale, Minn. I think the best willow for you to plant as a wind-break is what is known as the white willow. It grows to large size, and is perhaps the most useful of them all.—The elm seedling eighteen to twenty-four inches high in good heavy soil should make a height growth of from eight to ten feet in five years, provided it is crowded by other trees so as to take on an upright growth. If grown in the open without crowding or pruning it would hardly reach this height, but would have a much larger top and stem.—The Amour barberry is much like the common barberry, and is grown from seed or by dividing up the old stools. From seed the growth should make bushy little plants about eighteen inches high in two years.—I do not know what you mean by Diamond willow. What is generally known as Diamond willow in this country is a bushy willow which grows very vigorously in this section when young, but seldom attains much size. I do not think it as good as the white willow.—Arbor-vitæ well set and cared for will make an upward growth in the open of six to twelve inches a year. It seldom attains much size on ordinary agricultural land. On moist soil, however, it will attain large size. I have arbor-vitæ that ten years after being planted were perhaps seven feet high. They were but bushy little plants pulled from the woods when they were set out.—Manure can certainly be used to advantage around trees, but it should never be put in contact with the roots. A good way to use it is as a mulch about the roots, but not close to the trunk.—I think the best distance to set willow cuttings is to put them two feet apart in rows eight feet apart. This allows for cultivation for perhaps ten years, and the plants make a much better growth under these conditions than where the grass is allowed to come in. There is nothing to be gained by transplanting cuttings. In fact, every time the plant is moved it is set back just so much, as it loses a part of its root-system.—Both the American and the European larches are deciduous trees. During the summer season they have the appearance of evergreens.

### The Finest Trip in America

will be to the great St. Louis World's Fair this summer or in the fall. If you could go and have some one else pay all your expenses—every necessary cent—would you go? If you did not care to go, and some one offered you the cost of the trip in cash, would you accept it? That's our proposition. See page 23.



## Young Cockerels

It is a waste of food to keep young roosters after they weigh five pounds a pair, as they are sold as "old roosters" after their combs grow. In the market old roosters bring from five to seven cents a pound, while young ones often sell at from fifteen to twenty cents a pound. It is a loss to keep them longer than when they are old enough to sell.

## High Prices for the Best

Prices should always be kept in view, and the market reports should be carefully studied and compared. It does not pay to market inferior poultry. Quality is a prime factor in the sale of all articles. Chickens sell in the market at as high a figure, compared with beef and mutton, as ordinarily if they are in good shape and condition. Fancy fowls for breeders command just as high figures as they ever have whenever first-class specimens change hands. Every one who can turn out a better trio or two this year than his neighbor will find a ready market for them at even the advanced prices. It will be found that there are always people who want the best and who are willing to pay well for it.

## Light and Dark Eggs

Eggs with white shells are preferred in some markets, and bring higher prices than dark eggs, while in other markets the dark eggs are preferred. It has been demonstrated by experiment at some of the experiment stations that the color of the shell and yolk has no connection whatever with the quality of the egg, a pale yolk being fully as rich as a dark one. It is doubtful if there is any breed that lays eggs of uniform color and size, comparing all the hens in a flock. Among some flocks may be two full sisters, one laying eggs that are so dark in color as to appear dyed, while the eggs laid by the other may be almost as white as those of Leghorns. There is a difference in the color of eggs from all the hens, and they also differ greatly in shape. These facts show that there is no uniformity in some flocks, though there is more uniformity of eggs from pure breeds than from mongrels.

## Large Eggs

Some of the breeds lay larger eggs than others, something also depending on the hens and kinds of food, but over-feeding has much to do with the hens laying extra-large eggs, soft-shell eggs, double-yolk eggs and eggs of various shapes. If given opportunities to work for their food, the hens will not fatten very rapidly when producing eggs, and just as soon as the hens can have access to grass, cut off some of the food. It will be a waste of food to feed fowls that have the run of a large field, as they will fill their crops several times during the day with grass, young weeds, seeds, worms and insects of all kinds, securing a greater and better variety than can be provided. They will also lay more eggs if not overfed, as they will keep in good condition when busily at work for their food. Many persons feed their hens when the birds are foraging, and do not know why eggs are lacking, when the cause is too much feed during the spring and summer. It may be necessary to observe each member of the flock, but such work is one of the duties connected with the management of fowls.

## Pekin and Aylesbury Ducks

Pekin and Aylesbury ducks appear alike to the novice. They are white in color, but when compared there are several differences. The Pekin has a pinkish or buff tinge in the white, but the Aylesbury plumage is pure white. The bill of the Pekin is orange, and that of the Aylesbury is flesh-colored. The greatest points of difference are the shape and the carriage. The Pekin is upright in body, while the Aylesbury is more of the boat-shape. Pekin ducks were introduced into England from China, and from England were brought into this country, and are great favorites. Though at first sight they appear rather larger than their white rivals, this is not really the case, the apparent largeness being due to the fact that Pekins have a great abundance of fluffy feathers, which make them look larger than they really are. The great value of the Pekin for utility purposes lies in its marvelous laying powers, and in this respect it is one of the best of our domesticated ducks. Pekins grow rapidly, and attain maturity at an early age. They do not excel the black Cayuga in quality, but the flavor of the flesh is excellent and the meat is tender and juicy. They may be said to be non-sitters, as incubation does not seem to be a quality with them. They are ex-

## Poultry-Raising

By P. H. JACOBS

ceedingly active in habit, and are somewhat nervous in disposition.

## Cheap Foods

Wheat and corn are standard foods, as they provide the necessary materials for the production of eggs, and also because they are cheaper and more concentrated than many other foods, and as long as wheat and corn can be purchased at prices lower than other foods can be grown, just so long will those grains be used by farmers for feeding purposes. The question, however, is whether they are really cheap when fed exclusively. They may cost less, but the cost depends upon the final result. If too much corn prevents the hens from laying, by making them too fat to lay, then corn is not cheap at any price; but when wheat and corn can be made available in connection with other foods, and the hens are productive, there is nothing cheaper.

## Conditions and Climates

The domestication of animals and birds by man has compelled the adoption of methods in their care differing from those required when animals are not under the care of protectors. Natural conditions depend upon circumstances. The natural conditions, so far as the barn-yard fowl is concerned, are such conditions as man may provide for it. Warm quarters in winter, to protect against the cold, and a variety of food, that the hens may lay eggs in winter (which is really unnatural), with clean yards and feeding-places, in order to guard against disease, are natural, but there are no conditions that fit all breeds of poultry, for no two breeds can exist under the same treatment and both prove profitable, as one breed will fail under conditions that are favorable to the other. The attempt to subject fowls to what may be termed natural conditions has only led to roup and other winter diseases, resulting in the loss of a large portion of the flock and preventing the realization of a profit. It may be claimed that the open air, plenty of grain and a variety of food are about the proper conditions, but there are conditions for one season of the year and conditions for another. It may be "natural" for poultry to be exposed in the summer, but it is not natural to subject the hens to cold and storms in the winter. In the wild state many birds are migratory, and change their feeding-grounds as the seasons change, but our domesticated birds are, to a certain extent creatures of our own, made up and adapted to conditions to which we are subjected, and their thrift depends upon

any fault of the hen, and sometimes mistakes are made in handling the eggs, sprinkling them, or in "knowing more than the hen" in such matters. When

eggs are sprinkled, the evaporation of the water causes a rapid loss of heat, and though the chilling of the eggs may be imperceptible to the touch, yet it is sufficient, as the temperature for hatching, being one hundred and three degrees, is more than blood-heat, and the loss of warmth is too great to be borne by the embryo chick. It is wrong to remove the chicks before all are hatched, as their removal reduces the temperature of the remaining eggs, the animal heat of the chicks assisting to hatch the others. It is advisable to leave the eggs to nature when the chicks are coming out, and there will be fewer cases of the chicks dying in the shell. Above all, use no eggs from immature pullets, fat hens, or from flocks where disease may be suspected. Do not fail to keep the sitting hen free from lice.

## The Sex Problem

It would be a valuable aid to poultrymen and farmers if they could control the sex of their animals and birds, and it would be a large saving if one could select the eggs that produce pullets instead of perhaps having a brood composed almost wholly of cockerels. Many theories have been advanced, such as selecting round and long eggs, or those with the air-bubble in the center or at one side; but as some hens lay all round eggs, and others eggs of different shapes, the shape of the egg can be no guide. The difference in the sexes is not great, but it is a problem. No one can tell the sex in advance by examining the eggs, although occasionally some one comes to the front with a theory which is claimed to have been demonstrated. Wise men have experimented and worked in that direction for centuries, but Nature has not divulged any of her secrets regarding sex. All kinds of matings have been made, and hundreds of methods tested, but the best policy to pursue is to take the same chances that have been presented to our ancestors, and which have not been changed for us.

## Inquiries Answered

FEATHER-PULLING.—L. S. H., Martinsburg, Pa., wishes to know "the cause of fowls pulling feathers until their bodies are nearly bare." It is an acquired vice, due usually to idleness and confinement. The only cure is to use appliances for prevention, but the cheapest mode is to destroy each fowl caught in the act of feather-pulling.

COW-PEAS AS FOOD.—L. B. L., Manassas, Va., grows large crops of cow-peas, and desires to know "if they could not be



THANKSGIVING BIRDS

the manner in which they are protected during the seasons when they need the most care. The wild bird is fixed in its characteristics, many of them are the same to-day as they were centuries ago, and can exist under a great many disadvantages. They are free, have greater powers of locomotion, select their own mates in order to breed, and thereby produce offspring that are as hardy as their progenitors, but the domestic fowl has been bred to a place in the farm-yard and to remain near the habitation of man. They look to him for help, and cannot well exist without his aid.

## Unsatisfactory Hatches

It is very annoying to have a sitting hen come off with only two or three chicks from a nestful of eggs. The cause is due much more to the eggs than to

profitably fed to poultry." Cow-peas are highly nitrogenous, and should give profitable results if prices are not too high for the peas in the market.

LEGHORNS AS SITTERS.—A. J. C., Lima, Ohio, asks "if Leghorns will sit, as some of his Leghorn hens have hatched broods." The Leghorn hens, or those of any other "non-sitting" breed, so called, will become broody if made very fat by overfeeding, but the non-sitters, being active, are less disposed to sit than some others.

## A Good War-Story

will probably begin in the June 15th FARM AND FIRESIDE. Everybody is talking war just now, and this splendid story will be timely and one of the best you ever read. It will be illustrated. Read and learn.

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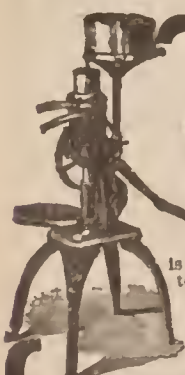


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## Live Stock and Dairy

### Distemper—Its Prevention and Treatment

A HORSE may have contracted a severe cold, and have a slight sore throat, followed by a discharge from the nose, and it will be said that he is suffering from distemper. At other times a horse will have an attack of acute laryngitis, and it is said that he has a bad attack of distemper. Catarrhal influenza may be prevailing, and the eyes weep, the discharge is great from the nose, and we hear it said that distemper is prevailing very badly among the horses. And still again, a severe sore throat attacks horses in a whole community. In more or less of the cases there will be swelling of the glands, and sometimes a gathering of pus will take place in them, a breaking and discharge. The animal can eat or drink very little. Here we have probably the only disease which might properly be called a distemper. It is a contagious disease, and when one horse in a stable is attacked it generally runs through the stable, although all may not be handled alike. It is this form of distemper (better called "strangles") which is by far the most common.

The first noticeable symptom, as a rule, will be a difficulty in the swallowing of liquid. When the animal tries to drink, a strangle follows, with a sharp, rasping cough, or hack. When this is noticed, waste no time in trying to render the attack as mild as possible. While the progress of the disease cannot be checked, it can be kept from becoming serious. The use of stimulating embrocations to the glands of the throat and along the windpipe will do much toward this. In a severe case of sore throat I have found a mixture of one ounce of gum camphor dissolved in half a pint of kerosene a grand application. Care must be used in not applying it too freely, or a blister will follow. Moderately used, watching its effects upon the skin, it becomes a valuable agent in alleviating the extreme soreness of the throat, also when bronchial disease or pneumonia is feared. In all cases, even in a mild attack, the animal should be warmly clothed, and do not think that old gunny-sacks or a fly-sheet will be sufficient. A good all-wool blanket large enough to cover the animal well is the needed thing. I have found that another grand remedy in relieving the soreness of the throat is a mixture of powdered chlorate of potash in teaspoon doses, with ten drops of the fluid extract of belladonna added, all stirred in enough simple syrup to make a paste. This can be smeared on the tongue with a wooden paddle several times a day. If there is difficult breathing, steaming the head with water to which some carbolic acid has been added will relieve it. Later, if there is swelling of the glands, and a suppuration is imminent—which, by the way, is the very best form strangles can assume—encourage the pus formation by the use of poultices of either wheat bran or flaxseed until the swellings take on suppuration, then lance them; but never lance until it is evident that pus is present. This can be determined by the swelling becoming pointed, or a soft place with the hair slipping off it, and generally a little exudation of yellow water is noticed. Then don't hesitate to lance, and make a free incision, after which with a syringe wash out the cavity once daily with a one-per-cent carbolic solution, or more plainly speaking, a teaspoonful of carbolic acid mixed in a little more than half a pint of warm soft water.

It is the cases where no swelling occurs outside which are the most to be feared, yet most horse-owners think the case bad when the swelling is great and the discharge from the abscess great. The case with no external swelling is liable to form abscesses in the pharynx, or take on a bastard form and cause death from laryngitis or lung-disease. It is to guard against the bastard forms of the disease that special attention should be directed, and that is why I advise such care and treatment in the early stages. Another danger lies in pus forming in the throat, which is swallowed, and later we have septicemia (blood-poison) or edematous swelling of the legs as the result of it. To guard against this I always use powdered hyposulphite of soda right along during the acute stage of the disease. Mix a teaspoonful of the sulphite in some syrup or molasses, and smear on the tongue. This will be swallowed with the pus, and prevent it from doing harm. It can be used three times a day.

Now a word about care. Pure air and cleanliness are essential in treating a case of strangles. Many persons seemingly want to put an animal in a foul,

close stable, and are very much afraid of cold air. Well, I do not advise cold air, but I do want pure air, and lots of it. I would rather an animal would stand in the open air well covered with an all-wool blanket, and legs bandaged, than be in an ill-ventilated stable. Don't be afraid of sunshine in the barn—a lack of it means a harbor for germs. Every hour in a bad case offer the sufferer some clean, fresh water from a pail, and hold it up, remembering that no horse with a sore throat can drink with its head down. I have seen many a man lead a horse out to the creek or trough to drink, and then say that he can't swallow a thing, as all the water runs out of his nose. It may be true that it is difficult to swallow when the pail is held up, yet I have seen many a horse drink half a pailful of water quite well when the pail was held up so that he could keep his head well up in drinking. Again, never attempt to work a horse with a sore throat. Never try to work the horse until he can eat and drink well, and when worked remember that he is still weak and the lungs are in such condition that a little overtaking is liable to bring on congestion. Fast driving or long pulling uphill with a horse just recovering from an attack of strangles has sent many a one to the bone-yard or caused broken wind.

As long as there is discharge from the nose, wash out the head twice a week with a solution composed of a teaspoonful of creolin to a pint of warm water. Many a case of catarrh can thus be prevented, also chronic ulceration of the throat. In case the legs swell, use the soda sulphite in half-ounce doses twice daily, and use hot water on the legs one at a time, rub dry, and bandage from hoof to knee or hock.

As to the feed of an ailing horse, scalded oats are to be preferred. Bran mash, so frequently recommended by veterinarians, will rarely be eaten. The horses cannot swallow it as well as grain. Tempt the appetite occasionally with a sour apple. (That doesn't mean to give a four-quart measure of them.) It is to the horse what a little lemon-juice or a swallow of lemonade is to a person who is sick.

In closing, I will say that a well-fed horse or colt rarely dies with strangles. A poorly fed one, with low vitality, is the one that the disease goes hard with. Let this be a lesson, and put it in practice, to keep all colts and horses in the best possible health. Never at any time think it economy to half feed and care for them. A well-nourished body, man or beast, can stand microbes by the million, while a poorly nourished one is simply a harbor for them to lodge, develop and kill their host.—C. D. Smead, V.S., in National Stockman and Farmer.

### Not Wholly a Mistake

Mr. J. F. Cochrane, Armington, Ill., writes, condensed, as follows:

"Will you please correct a mistake made by W. F. McSparran in the April 1st number of FARM AND FIRESIDE, wherein he states that Berenice, the Percheron stallion owned by McLaughlin Brothers, took first prize at the Chicago International Live-Stock Show last December? This prize was taken by Dogue, entered by Taylor & Jones, and now in my charge."

As I had sent the notes I had made regarding prizes won by this horse with his photograph, from which the fine cut was made in the issue of FARM AND FIRESIDE referred to, immediately upon receipt of Mr. Cochrane's letter I wrote to McLaughlin Brothers, asking them to set me straight, and quote from their reply as follows:

"The Percheron stallion Berenice along with three others won first prize at the International Exposition last December in Chicago as the best group of stallions the get of a single sire. In the regular classes Berenice did not win first prize."

So it appears that between the gentlemen I was not entirely wrong, as Berenice was co-winner of a first prize, and my unintentional error was one of class.  
W. F. McSPARRAN.

### A Very Little Favor

FARM AND FIRESIDE still needs thousands of new subscribers. Our friends who are regular readers of the paper can get them for the mere asking. Won't you please see your neighbors about this matter for us? We can't see them personally, and are therefore compelled to ask you to favor us in this one instance. Please send three or four new names to help swell the list.



## Live Stock and Dairy

### More About Mr. Detrich

His methods are no secret; he has really only fourteen acres, as one acre is taken up by the house, yard, barn, shed, chicken house and yard. When we were there he had twenty-eight head of cattle and a pair of horses; he buys no long feed or bedding, but purchases all concentrated feed used. The cows are stabled continuously, except dry ones and young stock, which are led in halter for exercise. He has two sixty-ton silos, which are filled with corn off four acres (thirty tons to the acre). He had a patch of oats and peas, which he was feeding green to cows. He cuts all hay and green food; the oats and peas were run through a cutter and mixed with hay run through in like manner. Mr. Detrich thought the green food too loosening fed alone. He also had several acres in corn for soiling purposes; between oats and peas and corn he used silage, of which he always managed to have enough left over to fill in that month or two in the summer. Every year about August 20th he sows a piece of ground to grass—a mixture of timothy, red clover, alsike and redtop, or herd-grass—without a nurse crop; this is ready to cut the following summer, and as it is mostly clover, he cuts it a little early and sets his mower a little high, and thus gets a good second crop, and if the season is very favorable, a third. He keeps this piece in grass three years, and as soon as the timothy is off the third year, he plows down, and sows rye. He has three patches of grass, sown in succession. The corn-ground is also put down in rye after the crops are off. This rye is used for soiling in spring as long as it is good, and the balance cut while in milk and made into hay; this is run through a cutter and used for litter, and sometimes mixed with other hay in cut feed. When we were there he had almost twelve tons of rye hay in a stack, also two or three tons in the barn, besides a couple of tons of clover hay left over from the previous year; and the present crop was cut, ready to put in the barn the first good day.

In the spring the rye-ground that was soiled from was put in oats and peas, the balance in corn again, and the oat-and-pea ground was put down in grass in August. The manure was hauled out every

me sixteen pounds of milk that tested four and two tenths per cent butter-fat, and she gave milk for more than a month longer before I could dry her up. She therefore gave an average of twenty-eight pounds of milk a day for three hundred and fifteen days, a total of eight thousand eight hundred and twenty pounds, at a four-and-two-tenths-per-cent test, making about three hundred and seventy and four tenths pounds of butter-fat at the creamery. I received an average of twenty-two cents a pound for butter-fat, making eighty-one dollars and forty-eight cents in all. Besides, I raised a calf on skim-milk. This cow has no long string of noted dams and sires. She came in on the twentieth of December, 1903, and gave thirty-six pounds of milk a day. She is now giving thirty-three pounds of milk a day, and gave about four thousand pounds in four months.

I have no ensilage. I feed eight pounds of corn-meal mixed with cut sheaf-oats (very light this year) and about twelve ounces of blood-meal a day, and what cane hay she wants to eat. I feed grain from five to six months, according to the season. She weighs about one thousand pounds. Two years ago I fed her bran with the corn-meal and chopped oat-straw, and one pound of oil-meal.

H. A. TROEGER.

### Feeding Cows on Pasture

I have always found that it has paid to feed the cows even when on good pasture. I like to have them in good flesh when they are turned to pasture, and the light feed of grain is continued twice a day. The kind given and the amount to each cow depends, of course, upon her individual responsiveness and her period of lactation. Even when I am feeding silage in summer as a supplement to the pasture I generally sprinkle a little bran or gluten feed over the silage. Silage, of course, can be grown and stored at much less cost than commercial feeds can be bought, and I always plan to have enough remaining from the winter feeding to keep my summer feed-bills down.

With successful dairymen there is no argument needed to establish the fact that the dairy that is uninterruptedly profitable is the one that is sufficiently fed year after year. Milk-making is an expression of energy, and energy making



READY FOR SHEARING—SCENE NEAR GULL LAKE, ASSINIBOIA

day, and the only trouble was to find a place to put it. The only available place when we were there was between the new-made haycocks. No artificial fertilizers are used, as the ground is full of humus.

The farm at first supported only two or three head of stock. The increased fertility came from never selling anything off the place except milk, and buying rich concentrates, like cotton-seed meal, oil-cake, gluten, bran, etc., to more than make up for the fertility sold off in milk. —Jos. Bringham, in Hoard's Dairyman.

### A Good Brindle Cow

I have read in FARM AND FIRESIDE of the wonderful Pennsylvania cow, Kessella 2d. That is all right for Pennsylvania, but Kansas wants to be heard from.

I have a brindle cow, five years old, the calf of a good common cow, by a sire of one fourth blood Jersey and balance shorthorn and Holstein, that gave me forty pounds of milk a day when fresh two years ago. After milking her ten and one half months she yet gave

and storing cannot be shut off and turned on like steam or water in a pipe. There is a constant consumption of energy in the bare processes of eating and living, and unless the supply be maintained from sufficient food-elements, results are going to be modified.

It is not claimed that a cow on good green pasture, if given bran morning and evening, will give enough additional milk to pay for the extra feed at once; but after a while the grass loses some of its digestible matter and turns more to fiber, and the cow has to expend more energy in digesting and assimilating her food, and just in this time of need the accumulated energy gathered from the extra feed given when there did not appear to be any results from it comes to the support of the cow and the profit of her owner. W. F. McSPARRAN.

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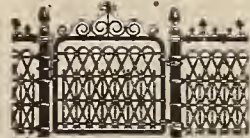
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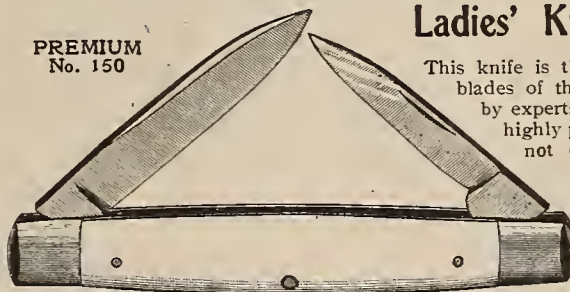


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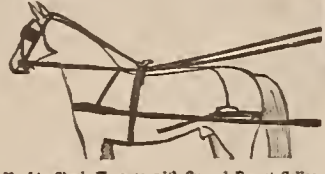


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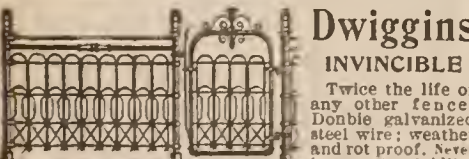
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## The Grange

By MRS. MARY E. LEE

### National Educational Association

THE National Educational Association meets in St. Louis June 28th-30th. Write Prof. Irwin Shepard, Minneapolis, Minn., for information in regard to rates.

No association is doing as much for the schools of America as the National Educational Association. Annually this great body of teachers comes together from every state in the Union to devise ways for the betterment of our schools. Few people have a just conception of the work done by this powerful and generous organization, or what they owe it for the best there is in school administration. Secretary Shepard writes: "The interests of rural schools are at the present time, and will be in the next convention, one of the prominent interests to be recognized. The question of consolidation of rural schools, better wages for teachers, better conditions and better courses of study, especially along the line of courses in elementary agriculture, are among the chief topics of interest with our people generally and with the officers and members of the National Educational Association."

The closest harmony should exist between the grange, which seeks the moral, intellectual and financial welfare of the country, and the National Educational Association. Hon. L. D. Harvey, of Wisconsin, whose services for rural schools have been of great extent and of exceeding value, is chairman of the committee on rural schools. The grange would make a wise advance to appoint a similar standing committee to cooperate with this committee to secure better school conditions. Both organizations seek the best interests of the schools; both will devise some plan. Happy indeed will it be if by cooperating they can work in harmony and with the increased power that cooperation gives. Our rural schools are in a deplorable condition. The farmers want a change, but they want to be sure that the change is wise and practical, and then they will work for it with energy. The National Educational Association can do no greater service to mankind, nor bring more glory to itself, than by cooperating with the ruling power among the farmers to devise some means of rural-school betterment and securing legislation thereon.

### State Master and Institutes

According to the rules of the Ohio State Board of Agriculture, no state lecturer is allowed to make a grange-talk unless invited by the local society to do so. Many lecturers have organization-tasks. Last year, after the repeated entreaties of a number of local institute societies, the state secretary and other friends of advanced agriculture, State Master Derthick, after two years' absence from the force, again took up the work. Many societies asked for the lecture on "Organization." As a result more than a dozen granges have grown out of the address, other granges have been strengthened, and the people have a higher conception of the mission of the grange. Recently a grange of fifty-two members was reported as a direct outgrowth of this lecture. I am now corresponding with localities in reference to grange organization where the lecture was given. The work has been exceedingly hard, because the business of the state grange had to be carried on, but it has borne most excellent fruit. One needs only to go to the records to find attestation of this fact. The state grange would do itself proud to pass resolutions commending the splendid work in the strongest terms. Grange doctrine must be preached in season and out of season, and the worth and power of the one preaching it has about as much influence as the subject-matter. "I have not been favorable to the grange," said one man of prominence at such an institute, "but it must be right, or a man of Mr. Derthick's standing would not stand for it. I am proud to go into it and march under his flag." If any one has thought of criticizing the state master, his criticism is lost in the appreciation of others. After all, envy and jealousy are but open confessions of inability and inefficiency.

### Growth in Cuyahoga County, Ohio

B. W. Jenks, deputy, Cuyahoga County, Ohio, writes as follows: "Since February, 1901, my county has gone from about ninety members to five hundred and twenty-five, and from two granges to five. One grange surrendered its charter in favor of near-by granges."

Brother Jenks is an enthusiastic worker. He, in common with other hard-working deputies, feels that the delegates do not appreciate the work of the deputies, and

urges a half-day session of the Deputy Masters' Association in the grange hall. Speaking of appreciation, I recall that a member who never gave an hour's time to the extension of the order, while participating in its benefits, said to me, "We delegates fixed you deputies so you can go to the state grange, and bear your own expenses. We put your pay for organizing at one dollar and fifty cents a day. That ought to pay you well."

"But you get one dollar and fifty cents a day and traveling expenses for the state grange, and haven't done a day's work for the grange except you were paid for it. You had a nice junketing expedition, put up at the best hotel in the city, and was courted because you belonged to a great order. On the contrary, the deputies walk, or drive their own teams, in all sorts of weather, among all classes, sometimes tendered the most gracious hospitality, sometimes quite the reverse, and urge and persuade indifferent farmers to come into the order. Now, this may win a starry crown in some dreamy hereafter, but deputies are earthly enough to want some angel-food as they trudge through this vale of tears. By the way, wouldn't you like to be deputy of your county?"

"No, sir-ee; I've no time for the work. Wouldn't leave my home and farm if not another grange was ever organized."

### Grange Notes

Ohio State Grange has established a bureau of exchange. Patrons wishing to buy or sell produce should write R. L. Holman, Springfield, Ohio, their wants.

From the reports of secretaries of state granges it is estimated that about twice as many members have been added to old granges as were in the new organizations.

It doesn't speak very well for a state institution fostered and protected by the grange to be without a grange organization. Members of the order are asking why.

Rush Creek Grange, Fairfield County, Ohio, organized February 20th as a result of State Master Derthick's address on "Organization" at the farmers' institute, is growing. It has good programs. An exhibit will be made at the Lancaster Fair.

One hundred and fifty-eight granges were organized and reorganized in the first quarter of 1904. If there are thirty members to an organization—a very low estimate—it means that over forty-seven hundred men and women have taken upon themselves the obligation to do all in their power to benefit their fellow-men.

For a number of years Fairfield County, Ohio, has been without farmers' organizations. It has two fine ones now, and several in process of organization. It is hoped that it will be thoroughly organized by the next state grange. It is a rich county, peopled with industrious, well-to-do, God-fearing people. Watch Fairfield grow. Its motto is "Pull for Fairfield."

Fairfield Grange, Basil, Fairfield County, Ohio, starts out with thirty-two charter members, all men and women of intelligence, wealth and social prominence. I reorganized this grange April 5th. The first official act of this splendid grange was to order a traveling library. John V. Tussing was elected master, James V. Goss secretary, and C. M. Giesy lecturer. Basil is one of the most musical communities I ever visited.

Harmon Gasche, Fulton County, Ohio, gatekeeper of Ohio State Grange, writes: "Chesterfield Grange celebrated its twenty-fifth anniversary January 17th, with over one hundred members present and twelve initiates. Jessie No. 367 is wide awake. Crescent is composed exclusively of young farmers who will make themselves heard from in the near future. Fulton County now has nine wide-awake granges, with prospects of one more, also a Pomona grange that looks after them." Brother Gasche is a tireless and efficient worker, with a rich fund of humor, and a warm geniality that wins friends.

### The New Mark

Some time ago FARM AND FIRESIDE announced that it wanted thousands of new subscribers, and asked each friendly reader of FARM AND FIRESIDE to help. The many friends of the old family favorite have done nobly, and all that is necessary is to keep it up. When you renew, send in your neighbor's subscription along with your own. That's how.



### CAMPING COMPANIONS

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which tells all about the "Stevens," how to care for it, target shooting, etc.

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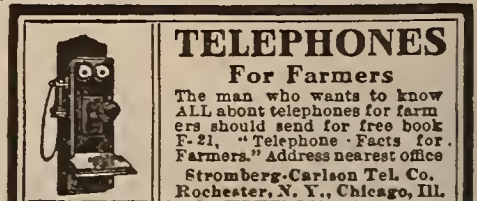
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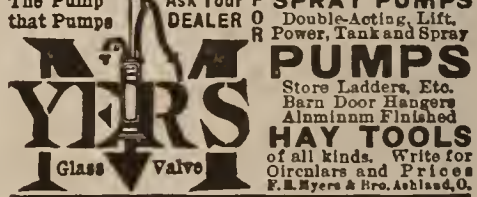


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## Farm Notes

### The Farmer's Reading

**B**EYOND question the greatest educational force in operation among the people at large is the press. We are a race of readers. It may be possible that our matter of reading is not always wisely chosen, but this suggests the question whether we shall read unwisely or not at all. There is not only a great deal of pastime reading, but much careless, undigested reading. The matter may be wisely enough selected, and be educational in its character, but the reader's mind may not be brought to a state favorable to an assimilation of what is read. It is not what passes over or through the mind, but what lodges there for future use, that builds up education. It is the reader who thinks as he reads, and makes classification of what lodges with him, who is able to use his reading for the promotion of results.

The most careful readers we have as a class are the farmers. We have no class of citizens so extensively well informed as they. They are digesting readers. They acquire the habit of reasoning logically. Back of the effect they go hunting for a cause. The simplicity of their lives keeps their conclusions straight. They think between their plow-handles, as Burns did his singing.

By this reading and reasoning they get their education. They have no other way to get it. Few of them go to college. True, many of them start to colleges, but the leading-strings of popular education do not reach back to the farms. The colleges send back few farmers; therefore the countryman who feels the need of education must dig it out of life along with his work—hence he becomes a reader. His "class" reading is, of course, the agricultural papers. From them he gets the literature of his business, accounts of what the experimenters and investigators are doing, and how the conclusions of these work out when applied to the testing operations of the farm. From these needs of the farmer, and to meet them, has grown our great agricultural press.

W. F. McSPARRAN.

### Borers

As we have no sure preventive for borers, we must confine ourselves to a remedy, which is the knife. We must know when and how to use it, or we will do as much damage as the borers do. The proper time to use the knife is in September and October. We want to get after the borers of the previous summer's hatching. This is very easily done, as they give themselves away by the small lump of wood-dust on the bark near the ground. It is sometimes found on the ground, but we can see where it came from. By shaving off the bark we will find the little pests from one eighth to three eighths of an inch long. If we have to cut deep to find large ones, it proves that the work was not properly done last fall. If we find three or four borers on the first examination, we must not think we have them all, for we have only the early hatching. In two or three weeks we may find many more.

J. F. WERNER.

### Catalogues Received

Kalamazoo Carriage and Harness Company, Kalamazoo, Mich. Descriptive catalogue of vehicles and harness.

The Keystone Farm Machine Company, York, Pa. "A Book of Field Scenes," illustrating the Hallock shallow cultivators.

Studebaker Bros. Manufacturing Company, South Bend, Ind. "A Personal Talk to the Dealer by the Studebaker Man," about vehicles.

George M. Clark, Higganum, Conn. "Large Hay Crops"—circular on intensive grass culture. "Grass as a Money-maker"—institute address.

The Boomer & Boschert Press Co., Syracuse, N. Y. Catalogue illustrating a full line of machinery for making cider, apple-jelly and apple-butter.

J. S. McGinnis, Secretary, Richwood, Ohio. Journal of Proceedings of the Ohio State Protective Association at its fifth annual meeting. Copies free to applicants.

The Aultman & Taylor Machinery Company, Mansfield, Ohio. Illustrated catalogue of grain and rice separators, traction-engines, clover and alfalfa hullers, sawmills, etc.

### The New Prize Picture Contest

Some time ago we announced that we would give \$100.00 in cash to the person who suggested the most appropriate name for our New Prize Picture. The announcement of the result of this contest will appear in one of the issues of FARM AND FIRESIDE in the near future.

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Liquozone does in germ troubles what all the drugs, all the skill in the world, cannot do without it. It cures diseases which medicine never cures.

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the best oxygen producers. By a process requiring immense apparatus and fourteen days' time, these gases are made part of the liquid product.

The result is a product that does what oxygen does. Oxygen gas, as you know, is the very source of vitality. Liquozone is a vitalizing tonic with which no other known product can compare. But germs are vegetables; and Liquozone—like an excess of oxygen—is deadly to vegetal matter. Yet this wonderful product which no germ can resist, is, to the human body, the most essential element of life.

### Germ Diseases

These are the known germ diseases. All that medicine can do for these troubles is to help Nature overcome the germs, and such results are indirect and uncertain. Liquozone kills the germs, wherever they are, and the results are inevitable. By destroying the cause of the trouble, it invariably ends the disease, and forever.

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Dysentery—Diarrhea  
Dandruff—Dropsy  
Dyspepsia

Hay Fever—Influenza  
Kidney Diseases  
La Grippe  
Leucorrhea  
Liver Troubles  
Malaria—Neuralgia  
Many Heart Troubles  
Piles—Pneumonia  
Pleurisy—Quinsy  
Rheumatism  
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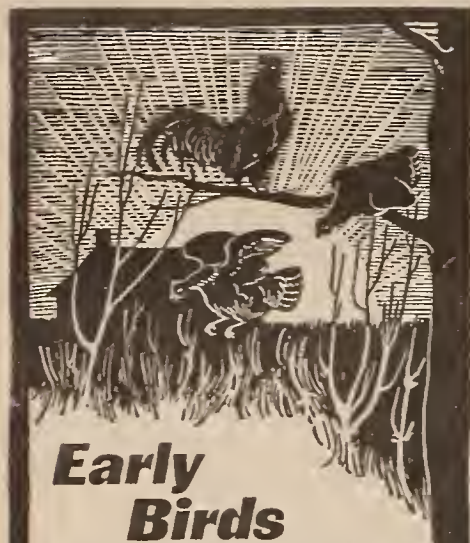
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## Around the Fireside

### In Aftertime

Ah, mystery! that two may walk  
Some garden's moonlight maze along.  
May pluck the violet's dewy stalk.  
And catch, amid their murmured talk,  
The last bird's evensong.

And one through every after year  
Shall nothing of that hour forget:  
Again its dumb bird's note shall hear,  
And find in fragrance lingering near  
Its faded violet.

And one, forsooth, the selfsame way  
Shall tread, remembering no more:  
Nor feel, for love of that lost day,  
The pulse of any future May  
Throb faster than before!  
—Blanche Trennor Heath, in Town and Country.

### The Sea-Fight at Chemulpo

THE first open sea-fight between Russia and Japan was on the ninth of last February in the harbor of Chemulpo, Corea, in which three Russian ships were lost. Bishop D. H. Moore, of the M. E. Church, was a passenger on one of these Russian vessels the day before the battle, while on his way to hold the session of the M. E. Conference in Corea. He was therefore an eye-witness of the battle, and sent the following to the "Western Christian Advocate":

"I left Shanghai February 6th, in the 'Sungari,' of the Russian line, plying between that city and Port Arthur. War was imminent. Disquieting rumors were flying. Minister Allen of Corea had directed our mission to cable me not to sail. But this increased my desire to go, especially as I had a conference to hold in Seoul this month, and the longer I delayed, the poorer the chances of getting over. General Allen, commander of our native scouts and constabulary in the Philippines, was the only other passenger, a typical high-toned Kentuckian. As he spoke Russian, we managed to get on very well with the Russian officers and crew. They were alert, the young captain not sleeping a wink the last night out. But we saw nothing until entering Chemulpo Harbor, where we cast anchor Monday morning, February 8th, at 8:30, near two fine Russian cruisers, 'Variag' and 'Koreitz.' Little did we think that the next day all three ships would be at the bottom of the sea. Not a Japanese war-ship was in sight. Our 'Vicksburg,' the British 'Talbot,' a French and Italian and a Korean cruiser were anchored not far away.

"Nothing unusual occurred until about 4 P.M., when a long line of Japanese cruisers, torpedo-boats and three transports—twelve in all—steamed in and anchored. It was dark before the troops began to disembark—some three thousand hardy-looking fellows, equipped for active service. The large Japanese population turned out 'en masse' to welcome the soldiers, who were quartered in the Japanese houses. The Japanese authorities called upon all Japanese to conduct themselves with the utmost propriety and circumspection toward Koreans and all foreigners, since Japan in this struggle is on trial before the civilized world.

"The soldiers landed, the fleet withdrew some eight miles beyond an island, and formed across the narrow channel by which alone heavy-draft ships can pass in or out—the 'Asama,' 'Takashito,' 'Gushirina,' 'Nanivo,' 'Chiyoda,' 'Nitoka' and eight torpedo-boats. Besides these, a second line was rumored.

"Tuesday, the ninth, was a lovely day, albeit the sea view was hazy. Like a shock ran through the city the report that the Japanese consul had notified the Russians that if they did not sail out by noon they would be attacked in the harbor at 4 P.M.

"The Russians decided to go out at once, and stripped their ships for action. The sea was strewn with everything wooden, from topmast to skylight—everything that would splinter. Sand-bags were piled up against and above the sides on deck. Every gun and every torpedo-tube was shotted, and shortly before noon they steamed out, cheered by the other battleships as they passed—

"Into the jaws of death;  
Into the mouth of hell."

"Our mission compound commands a fine view of the harbor and roadstead, and to the left and further seaward a still better view is secured. As the ships disappeared in the haze our hearts stood still with almost agonizing suspense.

"Then came the roar of two shots across their bows. Then, refusing to 'lay to,' they opened their batteries, and were opened upon by the concentrated fire of the Japanese. Fifteen minutes we

thought would suffice to end the unequal combat, but earth and sea shook under the awful thunder of the guns—thirty minutes, forty-five minutes, fifty-two minutes—and then, unable to break through, and scorning to surrender, the Russians swung around and steamed back to their anchorage, with their flags still flying. Sure of their prey, and perhaps unwilling to fight unnecessarily in the harbor, the Japanese did not pursue, but resumed their station in the roadstead, completely blockading the only channel. The big four-funneled Cramp-built cruiser was evidently badly wounded, and listed to port. The 'Koreitz,' the smaller of the two, was apparently uninjured.

"But we hastened to row out in a sampan to inspect for ourselves. We saw no scars or wounds on the 'Koreitz,' though the sailors were putting fresh paint on her hull here and there, as if to conceal scars, and the officer directing had his head bandaged. General Allen asked in Russian how they fared. The commander replied that they had no chance, and that at 4 P.M. the ship would go up. But the 'Variag' was evidently sinking. She was mortally wounded amidships, and had a huge rent in her upper works. Two of her funnels were riddled, and her bridge was a mass of twisted iron.

"A lieutenant, who was on the bridge when it was struck, was torn to pieces and blown overboard, all but his right arm and hand, which were found still holding the flag with which he was signaling orders to the 'Koreitz.'

"The boats of the other war-ships were removing her men to the obscurity of their own decks. The wounded were being taken on to the French and English ships—a hundred, more dead than alive. It was pathetic, the tenderness and veneration with which they handed down the Czar's portrait. Our ship, the 'Vicksburg,' alone gave no sanctuary, though her lifeboats helped remove the men. We hailed the first officer of the 'Sungari,' the ship from which we had landed the day before.

"He indicated that all was lost, and shortly after we saw the men dash below, as if to scuttle her. Now the men are hastening to leave the 'Koreitz.' We are within a few yards of her last two boats as they put off. It is twenty minutes till four, and we recall her captain's words and hasten our rowers. There is an island surmounted by a revolving light six hundred yards away. We land and climb to its summit. The hands of the watch denote four. Instantly a terrific explosion in the stern, and almost simultaneously another forward, sent the 'Koreitz' to its doom. Two malignant volumes of smoke and debris leap, writhing and twisting upward, clenching and struggling as though two monsters in mortal combat. As their black bodies pulled apart for a moment, the sinking sun, tearful with filmy haze, shone through.

"And list! Through the blackness of darkness and the rain of falling fragments of their ruined ship comes stately and solemn and grand from the French ship, where they had asylum, her crew's majestic chant of the Russian national hymn, at once their new oath of allegiance to the white Czar and a requiem over their lost ship.

"The smokestack, her gleaming prow and portions of her steel frame show where the 'Koreitz' met her fate.

"Now a fierce fire rages in the bunkers of the 'Variag,' more and more she lists to port. She has outlived the sun, but at six o'clock, with one great shudder, like a huge leviathan, she turns on her side and dies.

"Only the 'Sungari' remains, so recently our home. She sinks all too slowly. A boat puts off to her from the French cruiser, and soon her beautiful upper works are a roaring furnace of flame. All night she burns and glows, and dies with the morning light.

"All this in a 'state of hostility.' What shall we see when war is formally declared?"

### Monster Locomotives

Ten monster locomotives, the largest in the world, are in process of construction at the Baldwin Works, Philadelphia. Each will be capable of pulling a greater weight than ever before accomplished by a single locomotive. It is expected that these locomotives will prove the beginning of an epoch in railroad-freighting which may result in the abolition of thousands of smaller and weaker engines by the railroad companies of this and other countries. They are the product of a theory that one gigantic locomotive having the power of two of the present average type can be operated more cheaply than two small ones.

The ten locomotives will be able to pull sixty thousand tons of dead weight on a level grade. If the first-class armored steel battleships "Vermont," "Connecticut," "Kansas," and "Ohio" were placed upon wheels on a level track it is safe to say that they could be pulled across the continent by the ten locomotives. A string of fifteen or twenty ordinary freight-engines would be required to pull a similar weight.

The weight of each engine complete will be about two hundred and eighty thousand pounds, and that of the tender two hundred thousand pounds. Their speed will be much greater than that of freight-locomotives now used in pulling the ore-trains of the Santa Fe road, and their cost will probably be at least a third more than that of the best freight-engines now on the road.

From the time the first cast was made until the first shipment shall start over the rails for the Southwest, fifty days will have elapsed. A force of about eighteen thousand men assist in the construction of each of these engines, the thousands of pieces of iron and steel being handled by at least half that number.

These engines are much longer and higher than the ordinary ones, and when placed beside one of the old-style locomotives the latter appears a pygmy indeed. The most distinguished features besides the size are the tandem cylinders and the immense driving-wheels. The high-pressure cylinders are placed well forward, and just back of them are the low-pressure. A man of average height standing beside one of the great driving-wheels would not reach to the top rim, for each of the drivers is about eighteen feet in circumference. There are five pairs of drivers, and in the extreme front of the engine is a pair of pony wheels.—World's Events.

### An Artificial Wild Garden

In the center of the wild garden at the World's Fair the visitor can easily imagine himself in one of Nature's beauty bowers, so great is its extent and so thick the flowers and shrubs. He can fairly revel among the buttercups and daisies, the sweet-williams and the dainty violets; and he can inhale without stint the sweet fragrance of the wild rose, the wild honeysuckle and the clematis. The graceful wild water-lily, the chinkapin, the water-hyacinth, the wild grasses and other aquatic plants will cause him the keenest delight. Clumps of elder and sumac and the blackberry give a greater wildness. There a bunch of goldenrod, here the golden glow, and within easy reach Virginia creepers and trumpet-vines hide the gnarled trunk of a fallen king of the forest, making it exceedingly real. Jack-in-the-pulpit preaches amid groves of May-poles. The jimson-weed with its lavender blossoms, the pokeberry with its clusters of red fruit, the Indian turnip with its flower and roots of fire, all turn the memory back to the boyhood days when one was wont to wander in wood and field, for there is many a reminiscence associated with these floral barbarians. Hundreds of other wild flowers are included, and it is full two acres of Nature's glories of the season that are shown, in the midst of which a rivulet flows toward the lake.—World's Fair Commission, in Floral Life.

### Senator Clark's Butter-Roll

When Senator Clark was deprived of his seat in the Senate, and Marcus Daly glorified in his revenge, the former exhibited no bitterness, but related a story which signified that an apparent loser may yet be a winner.

"In Montana," said Senator Clark, "a wealthy farmer arranged for a contest one Fourth of July. Casks of milk were to be taken from one end of the farm to the other, and the first man in with his cask of milk unspilled was to receive a prize.

"The farm was large, the distance traversed rough, but the casks were strong. They were kicked, rolled, thrown and carried over the course. Naturally one man was first, all the others following closely except a heavy German. He was too stout to kick or roll his burden, and fifteen minutes later came waddling to the finish, having carried his cask the entire distance.

"I said the first man in with his milk," proceeded the farmer, "and our German friend, who came in last, wins the prize. The others in their hurry have churned the milk of their casks into butter."

"Thus proving," concluded the Senator, "that the race is not always to the swift."—Wayside Tales.

### A Necessity

The farmer needs all the sound advice that can be had on matters pertaining to the farm (a true principle in any business), and the columns of FARM AND FIRESIDE fairly teem with the best there is. Invest twenty-five cents in a year's subscription, and get the best. Invite your neighbor to join.



## Acres of Violets

**P**RACTICALLY all the violets that are in the great New York market, as well as the other large cities of the state, are grown within an area of about twenty-five square miles in Dutchess County and near the Hudson River. Farmers and townspeople alike are engaged in their propagation, so that the industry employs hundreds of people and involves an investment of probably more than half a million dollars. This year it is estimated that about one hundred million violets will be shipped out of Rhinebeck, most of them going to the metropolis.



A LITTLE BUNCH OF VIOLETS

It is only recently that this town has become thus distinguished. Within the last five years, and particularly the last two, the production of violets has rapidly increased, until now there are about two hundred separate greenhouses in and about Rhinebeck. During the year 1903 about sixty new houses were built, and it is said that as large a number will be erected this spring as the proceeds of the past winter's business would appear to justify.

Labor is scarce in Rhinebeck. The violet-growers demand constant help. Young men, as well as young women, are engaged in the greenhouses, and the particular work of the women is picking and arranging the flowers in clusters. But in describing the various processes in the progress of the violet from the ground to my lady's belt I had best begin at the beginning. Just as the plants cease blooming in the spring they produce runners like those which are a part of the strawberry-plant. These runners are cut off by the grower, and planted in sand, and that is the beginning of the new plant. The new violets grow all summer in the sand-boxes, and in the fall they are transplanted to the greenhouses. These have been made ready with great care. Every year the beds in the greenhouses are filled with fresh earth. The old earth with the old plants in it is hauled away to make ready for the new crop. Those who have greenhouses in town must buy their soil from the farmers, paying seventy-five cents a wagon-load. This earth is enriched with



## Around the Fireside



of blossoms on each plant from fall to the spring following is about seventy. The greenhouses are twenty or twenty-four feet wide, and one hundred, one hundred and fifty or two hundred feet long. Some of them contain eight thousand plants.

The violet's enemies soon appear. The flies and the spiders are very small but persistent. The flies are like small plant-lice. They multiply rapidly, and attack the leaves and stems, soon killing the plant. When the insects come (from no one knows where), the violet-grower must "gas" his house. Usually a chlorine gas is generated in the greenhouse, but it must be used very carefully. If too dense, it will destroy the plants; if not dense enough, the insects will survive it. So the violet-man must exercise great caution. A common misfortune of the violet-grower is to have a greenhouse "burn out" when he uses gas that is too strong. This does not mean, necessarily, that the plants are killed, but that they are stunted, and the flowers are faded and lose their fragrance.

Another important consideration is the temperature. During the day the air in the greenhouse should be kept at about fifty-five degrees Fahrenheit; at night it may be permitted to cool ten degrees.

Every morning, usually, the violets are picked. This is done before nine o'clock, and as they are gathered they are arranged in bunches just as you would arrange them if you picked them in the fields, except that the bunches of the violet-grower always contain exactly fifty blossoms, or sometimes one hundred; and these larger bunches are called "extras." A border of leaves is arranged around the flowers—this is girls' work—and each bunch is tied with violet-colored twine. Then the flowers stand for two hours in cold water to freshen them. After that they are packed in boxes, surrounded by four or five thicknesses of oil-paper, and the violet-grower carries his day's product to the express company's office. The express receipts at Rhinebeck for violets alone amount in a year to seven thousand dollars, which suggests the volume of the business. The 12:21 P.M. train from Rhinecliff carries the violets to New York City, arriving there at about 3:30 P.M.

The boxes are delivered by the express company to the wholesale dealers, most of whom are in Twenty-eighth and Twenty-ninth Streets, in the block between Broadway and Sixth Avenue. The next morning the florists all over the city have fresh violets. The price to the grower varies widely—from fifteen cents to several dollars a hundred—depending on the quality of the flowers and the demand for them. At the holidays and at Easter the greatest number are shipped

The most significant feature of the report, as indicating the popular understanding of the intimate relation between forest-preservation and the water-supply, is the number of applications to the bureau for assistance in the management of private forest-lands. These applications, nearly one hundred in all, represent a total area of 947,047 acres, while the total area of private lands for which assistance has been requested since the bureau undertook this phase of the work is 5,656,171 acres. There is also noted, as a result of the growing demand for the irrigation of arid lands, a gratifying disposition on the part of the lumbering and railway interests to coöperate with the government in the preservation of existing forests and in the perfection of plans for the renewal upon arid lands of the timber which is so essential to a perfect irrigation.

Great as has been the progress in 1903, however, the saving of the forests has actually been very small. Says Mr.



A FEW RARE BLOSSOMS

Pinchot: "The saving of the forests by wise use is but little nearer than it was a year ago, except for the wider spread of a knowledge of the nature and objects of forestry. The means available are yet too feeble to make much impression on the gigantic task of preventing the destruction of the lumber-industry, the fourth among the great industries of the United States, and of using conservatively the forests which supply wood and conserve water for the use of the nation."

Mr. Pinchot makes a plea for larger equipment and facilities for carrying on the work of the bureau, declaring that there is grave danger that the forests will have disappeared before the bureau of forestry can be made ready to use the opportunity to save them unless the present facilities are increased. The total area of the forest reserves is now about 62,393,565 acres. The total woodland area of the United States, however, is estimated at 699,500,000 acres.—Chicago Record-Herald.

## Curious Facts

A Wilson petrel, evidently blown in from the coast, was killed by a cat not long ago in Winchester, N. H. Winchester is eighty miles from the coast, and these birds are very seldom found more than ten miles inland.

The most magnificent tomb in the world is the palace Temple of Karnak, Egypt, occupying an area of nine acres, or twice that of St. Peter's at Rome. The temple space is a poet's dream of great columns, beautiful courts and avenues of sphinxes.

The largest room in the world under one roof and unbroken by pillars is at St. Petersburg. It is six hundred and twenty feet long and one hundred and fifty feet in breadth. By daylight it is used for military displays, and a whole battalion can completely maneuver in it. By night twenty thousand wax tapers make it beautiful. The roof is a single arch of iron.—American Cultivator.

## Common Errors

There are persons who say they cannot get fine seeds to grow. That is because they cover the tiny things too deep, drown them in a deluge of water, or let the ground get parched with heat. If they will not reform on these lines, let them eschew all attempts at growing petunias, nicotiana or cockscomb in the

house. They can hardly fail on balsam, carnation, stock or datura. If they will have forethought enough to chip off a tiny bit of the shell of the big nut-like moonflower seeds, and then soak them for a few hours, they can get a fine start of this handsome vine from early April-sown seeds. Or they can grow fine canas from seed by pouring boiling water over them, and then letting them soak for twenty-four hours. There is a pleasure in planting seed of something choice, and then watching its development in every stage of its growth until it becomes a perfect specimen of its kind.

To start seeds in the house, get shallow boxes on the style of the familiar cigar-box. Get some good mellow soil from the garden, and pulverize it by rubbing it through the hands until it can be made no finer. Fill the boxes three fourths full of this, and smooth the top. With a small ruler or bit of board crease little grooves across the surface, and in these little trenches sow the seed evenly and thinly. Write the name of each kind of seed on the box at the head of the rows. There is nothing more annoying than to have a lot of seeds come up and not know one from another. If the seeds are small, barely cover them; if large seeds, push them down a little deeper in their groove, and then pat the earth down over their heads. Always firm the earth well as soon as a box is planted, then sprinkle the soil until it is pretty wet, and cover with glass or with a lid of some kind, or better yet, with a thick cloth folded so as to exactly fit the top of the box.—The Housekeeper.

## Soldiers of the Mikado

The Japanese army as it exists today is modeled after those of Europe, and is worthy to be compared with the army of any of the great powers. It is divided into infantry, cavalry, artillery and engineers, and subdivided into regiments, battalions, batteries and companies. Each company is commanded by a captain, who has under him two first lieutenants, two second lieutenants and nearly two hundred enlisted men. Four companies constitute a battalion, and three battalions a regiment.

The uniforms of the Japanese army are neat and serviceable, they being of modified French design. All Japanese uniforms are black, the arm of the service being designated by the stripe on the trousers, as is the custom with us. Infantry have bright red stripes, engineers dark red, artillery yellow and cavalry green. Cavalry trousers are red, with leather boot-tops reaching to the knee, all other trousers being black. Officers' coats are braided across the breast, the coats of the enlisted men being extremely plain. Insignia of rank are worn on the sleeves. In the case of officers they are in the form of a gold braid, arranged in a design somewhat similar to that worn by our officers when in full dress, and extending from the cuff to the elbow. A colonel wears six stripes, a lieutenant-colonel five, a major four, a captain three, a first lieutenant two and a second lieutenant one. Non-commissioned officers wear stripes straight around the arm and directly above the cuff of the color of the arm of the service to which they belong; three stripes for a first sergeant, two for a sergeant and one for a corporal.

The infantry and engineers are armed with a magazine-rifle which the Japanese themselves invented, and which they claim to be the finest small arm in the world. It uses smokeless powder, is sighted for two thousand yards, and is said to be able to project a bullet for three miles. Each rifle is equipped with a bayonet having a cutting edge, which is a modification of the short sword of the samurai. The cavalry carbine is also of Japanese make, and is said to be no whit inferior to their rifle. Besides his carbine, every cavalryman is armed with a saber. Artillerymen wear short swords, and the sergeants carry revolvers. All officers and all sergeants of the artillery corps and signal service carry field-glasses.

The pay of the Mikado's soldiers would hardly tempt foreign enlistment, and even the greenest "rookie" in the United States army would think twice before he gave up his thirteen dollars a month for the two cents a day which a Japanese private receives. When a private becomes a corporal his pay is advanced to six cents a day, and when he reaches sergeant's rank he gets ten cents for his twenty-four hours' duty. A first sergeant makes double this sum, and an extra-service sergeant is the happy possessor of thirty cents each day. This is as high as an enlisted man can rise without being a graduate of the military officers' school.—Frederick Gilbert Blakeslee, in Leslie's Weekly.

French is the language of more than a million of the five and one half million of Canadians.—American Cultivator.



SPRAYING VIOLETS FOR THE RED SPIDER

manure, which is bought in New York City, shipped to Rhinebeck by the carload, and which costs the violet-grower, including freight, two dollars a ton. So that to replenish the beds of the greenhouses each year costs about one hundred dollars.

When the new soil under the glass is ready, the violet-plants are set out in it about nine inches apart. At first they need large quantities of water. The beds are flooded once or twice a week. The buds and blossoms soon appear, and each healthy plant continues giving its flowers until spring. The average number

to town, and the prices are highest. The wholesaler makes a profit of about fifteen per cent on his transactions. Can you tell me what the retailer makes?—Leslie's Weekly.

## The Work of Forest-Preservation

The National Irrigation Act passed by the last Congress and the many allegations concerning land and timber frauds will serve to attract more than ordinary public attention to the report of Mr. Gifford Pinchot, head of the bureau of forestry, detailing the work accomplished in his department during the last year.



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## The Housewife

### Cleaning House

THESE few bright, sunny days are ideal ones for spring cleaning. It is better not to put it off too late, as it becomes too warm. Begin with the closets, and get them in order; then the spare room should be the first cleaned. Take down the shades and pictures, clean them, and set them in another room. Put the bedding where the sun and air can have access to it, then take up the carpet and shake it good. Wash the bed-slats with hot water, putting a little corrosive sublimate in a pint of turpentine, and applying it with a brush to every corner and crevice. Never let bedbugs get into your beds if you can avoid it. If you do this every spring and fall you will not be troubled with them. Wash the windows with warm water, dissolving a little borax in it, which will make it clean much quicker. Wipe dry, and polish with newspapers. Scrub the floor, let it dry, then put a cloth around the brush part of the broom, and wipe the walls all off. If there are any grease-spots or stains in your carpet, make a warm, soft suds of rain-water and washing-powder, and scrub the spots with a brush and this suds, which will clean it beautifully. Change the pictures and the furniture a little if you can. Proceed with each bedroom the same way, and then take the parlor and dining-room, kitchen and cellar next. Always clean one room at a time, and take one day for a room unless you have plenty of help. Borax and sugar scattered about in the pantry and kitchen will clear them of all insects, etc. It is better to use this, as other articles are poisonous and unsafe. S. J. H.

### Leaf-Square Lace

Cast on 37 stitches.

First row—K 3, o, p 2 tog. k 3, n, o, k 1, o, n, k 4, o, k 20.  
Second row—K 20, p 2, k 11, o, p 2 tog. k 3.  
Third row—K 3, o, p 2 tog. k 2, n, o, k 3, o, n, k 4, o, k 18, o, n.  
Fourth row—K 20, p 3, k 11, o, p 2 tog. k 3.  
Fifth row—K 30, p 2 tog. k 1, n, o, k 5, o, n, k 4, o, k 20.  
Sixth row—K 20, p 4, k 11, o, p 2 tog. k 3.  
Seventh row—K 3, o, p 2 tog. k 3, o, n, k 1, n, o, k 7, o, k 9, o, k 9, o, n.  
Eighth row—K 11, p 1, k 9, p 5, k 11, o, p 2 tog. k 3.  
Ninth row—K 3, o, p 2 tog. k 4, o, k 3 tog. o, k 9, o, k 7, n, o, k 1, o, n, k 9.  
Tenth row—K 11, p 1, k 9, p 6, k 11, o, p 2 tog. k 3.  
Eleventh row—K 3, o, p 2 tog. k 17, o, k 6, n, o, k 3, o, n, k 6, o, n.  
Twelfth row—K 10, p 3, k 8, p 7, k 11, o, p 2 tog. k 3.  
Thirteenth row—K 3, o, p 2 tog. k 3.



LEAF-SQUARE LACE

n, o, k 1, o, n, k 5, n, o twice, n, k 1, o, k 5, n, o, n, o, k 1, o, slip 1, k 1, pass slipped st over, o, n, k 7.

Fourteenth row—K 9, p 5, k 7, p 4, k 1, p 3, k 11, o, p 2 tog. k 3.

Fifteenth row—K 3, o, p 2 tog. k 2, n, o, k 3, o, n, k 2, n, o twice, n, o twice, n, o, k 4, n, o, n, k 1, o, k 1, o, k 1, slip and bind 2 sts as before, o, n, k 4, o, n.

Sixteenth row—K 8, p 7, k 6, p 3, k 1, p 3, k 1, p 1, k 11, o, p 2 tog. k 3.

Seventeenth row—K 3, o, p 2 tog. k 1, n, o, k 5, o, n, k 3, n, o twice, n, k 3, o, k 3, n, o, n, k 2, o, k 1, o, k 2, slip and bind, o, n, k 5.

Eighteenth row—K 7, p 9, k 5, p 6, k 1, p 3, k 11, o, p 2 tog. k 3.

Nineteenth row—K 3, o, p 2 tog. k 3, o, n, k 1, n, o, k 3, n, o twice, n, n, o twice, n, k 2, o, k 4, o, n, k 7, slip and bind, o, k 4, o, n.

Twentieth row—K 7, p 9, k 5, p 5, k 1, p 3, k 1, p 1, k 11, o, p 2 tog. k 3.

Twenty-first row—K 3, o, p 2 tog. k 4, o, k 3 tog. o, k 6, n, o twice, n, k 5, o, k 5, o, n, k 5, slip and bind, o, k 7.

Twenty-second row—K 8, p 7, k 6, p 8, k 1, p 3, k 11, o, p 2 tog. k 3.

Twenty-third row—K 3, o, p 2 tog. k 23, o, k 6, o, n, k 3, slip and bind, o, k 6, o, n.

Twenty-fourth row—K 9, p 5, k 7, p 13, k 11, o, p 2 tog. k 3.

Twenty-fifth row—K 3, o, p 2 tog. k 3,



LAUNDRY-BAG

n, o, k 1, o, n, k 16, o, k 7, o, n, k 1, slip and bind, o, k 9.

Twenty-sixth row—K 10, p 3, k 8, p 14, k 11, o, p 2 tog. k 3.

Twenty-seventh row—K 3, o, p 2 tog. k 2, n, o, k 3, o, n, k 16, o, k 8, o, k 3 tog. o, k 8, o, n.

Twenty-eighth row—K 21, p 15, k 11, o, p 2 tog. k 3.

Twenty-ninth row—K 3, o, p 2 tog. k 1, n, o, k 5, o, n, k 16, o, k 21.

Thirtieth row—K 21, p 16, k 11, o, p 2 tog. k 3.

Thirty-first row—K 3, o, p 2 tog. k 3, o, n, k 1, n, o, k 19, o, k 19, o, n.

Thirty-second row—K 21, p 17, k 11, o, p 2 tog. k 3.

Thirty-third row—K 3, o, p 2 tog. k 4, o, k 3 tog. o, k 21, o, k 21.

Thirty-fourth row—K 21, p 18, k 11, o, p 2 tog. k 3.

Thirty-fifth row—K 3, o, p 2 tog. k 29, o, k 1, o, n ten times.

Thirty-sixth row—Cast off 19, k 1, p 19, k 11, o, p 2 tog. k 3. L. M. MONTGOMERY.

### Laundry-Bag

This pretty laundry-bag is made of art ticking, which comes one yard wide, and it requires three fourths of a yard. Take half a yard of the material, fold square on the wrong side, and sew up. Cut out a round piece in the center of one side about eight inches in diameter, then turn right side out, and bind the opening with a narrow piece of the same two inches broad. Make the strap double, one inch wide and twenty-two inches long, and fasten on opposite sides of the band. Take two pieces of pasteboard four inches square, and cut in two so as to make four three-cornered pieces: put one in each corner, and fasten them in place with French knots made of white silk crochet-cotton. Also make "tassels" of the same for the corners, or if preferred, ribbon bows. M. H.

### Herbs and Their Value

It was Ruskin who said, "Cookery means the knowledge of all fruits and herbs and balms and spices, and of all that is healing and sweet in fields and groves, and savory in meats."

While a kitchen-garden is a great comfort and convenience, and gives big returns for a few hours' work, a small space devoted to sweet and medicinal herbs requires less time, and is equally important. Again, it can be turned to practical

value, and will yield its owner a comfortable sum every year. Fewer people raise herbs than almost anything else, and there is always a demand for fresh ones.

Every garden should contain at least one hop-vine. Hops require a very rich soil, but after once starting they will live for years. They are grown extensively in southern England. The portion of the hop which is used so much for brewing is the ripened cone of the female plant. The oil of hops is an anodyne and narcotic, hence its use in pillows for nervous troubles. The bitter part of the hop is an excellent tonic. The fiber of the stems is utilized in the manufacture of a coarse, strong fabric in Sweden. Cold hop-tea is frequently given patients afflicted with insomnia. Hops boiled in vinegar and water are excellent for fermentations over the bowels and other organs. Hops should be picked early in September, before a frost, and spread in the attic or a clean place in the barn. The window should be left open until they are dry, when they should be put into bags and hung away.

Sage is a very popular herb for which every housekeeper finds use, and there is always a demand for it. Parsley requires almost no attention, and is very popular as a garnish, as well as for flavoring. It also has a medicinal value. Cives grow easily and spread rapidly, and are very popular for salads and sandwich-fillings. Thyme, summer savory, pepper-grass, caraway and mint are all necessary plants in a garden of this kind. A few horseradish roots will prove useful for various purposes. The tarragon-plant is not as easy to start as the others mentioned above, but it makes a delicious vinegar for salads and is quite popular.

In medicinal herbs the old-fashioned boneset, or thoroughwort is always in demand as an emetic, cathartic and a tonic. As a tonic or for a bilious attack from one fourth to half a glass is prescribed twice a day. The blossoms should be gathered when in full bloom, before frost, and tied in large bunches to dry. Camomile is another old-fashioned herb which originally came from England. Nothing does so much toward making a flower-garden thrifty as to grow a camomile-plant in the midst of it. A drooping plant will nearly always revive by simple contact with this herb. It is commonly known as an excellent tonic, and the blossoms, when boiled in milk, are used to reduce glanular swellings caused by a cold. A strong camomile-tea will destroy all kinds of insects which are troublesome on plants. Wild camomile, better known as mayweed, grows only in sunny places, and is very popular with country people as a cure for colds and as a tonic. It is also thought by old-fashioned people to have prevented the old-time fever and ague.

In the gathering of herbs for medicinal purposes, whether for home use or for the market, it is well not to forget smartweed, which is of considerable value for a great many purposes, not the least of which is for poultices.

CARRIE MAY ASHTON.

### Apple Fritters

Slice some apples, dip them in a batter made of one egg, sugar, milk, and flour enough to thicken. Fry a golden brown in boiling fat, sprinkle with lemon-juice, and serve very hot.—Modes.

### Keep the Booklets

Advertisers of these times are giving to the world fine literary and artistic work, and many of the booklets and cards thus sent out are too pretty for the fate that often befalls them. So keep them. If not useful now, they may be sometime, and meanwhile make them ornamental in the sewing-room, office or den. Attach cords to each little book—the cords may be either of one length or color or of different ones—and hang them up on the wall in a row or a circle or other figure. SUE H. McSPARRAN.

### A Helpful Hint

If you live in a dusty country, and are going away from home for several weeks, it is a good idea to turn a paper sack down over each of the lamps and chimneys. The idea can be carried out in regard to other things about the house that would otherwise be covered "three deep" with dust in a short time. And a dirty house is a trial to come back to.

MAY MYRTLE FRENCH.

### Cover for a Couch

If a plain cover is desired, there are plain heavy materials of jute, velours, linen and taffeta; in figured goods there are cretonnes, tapestries, Bagdad stripes and Kelim rugs.—Delineator.

### Try It

Try to win one of our free trips to the St. Louis World's Fair. See page 23. It will be a comparatively easy thing to do.





## The Housewife

### The Decorative Value of Fruit-Blossoms

It is strange that people will rave over the beauty of an orchard in full bloom, and yet are so slow to recognize the value of the sprays of bloom as cut flowers in the house. This was called to my attention last year in an accidental way. There was to be a March wedding in a neighbor's family, and the plans were made for it to be an extra-swell affair, with a color-scheme in green and white. Quantities of white roses and carnations and yards of asparagus and smilax had been engaged from the florists in the nearest large city. Just the day before the wedding, communication between the two places was cut off by an accident on the railroad, and the hostess of the occasion found herself up against an emergency. There were no roses in bloom in the little Southern town, and the hyacinths and narcissi were all past their best. The vulgarity of paper flowers was not to be considered for a moment, and she was about to decide reluctantly that she must abandon her scheme for decoration, and use just any flowers which it might be possible for her to obtain from the neighbors' gardens.

"Why, look at those pear-trees!" exclaimed one of the bridesmaids, a bright, resourceful girl. "Just go ahead with your plans, Mrs. Clisby; we girls will supply you with all the white flowers you can use."

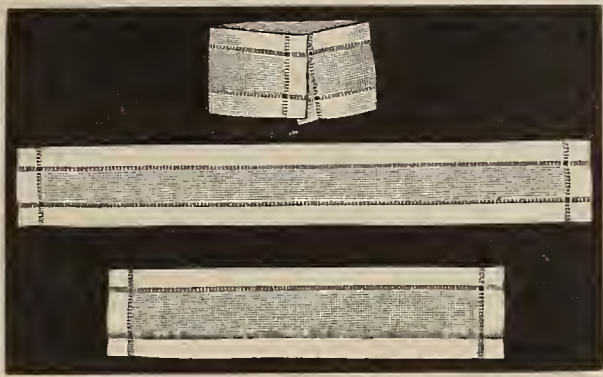
So they did. Late in the afternoon before the wedding the girls brought in the blooms by armfuls, and banked the mantels with them. They filled clear glass vases and bowls with them, and used them lavishly on the bride's table. The effect was delightful. The tender young leaves still held a hint of pinkish brown in the tips showing here and there among the dainty blossoms, and the clean, delicate odor pervaded halls and drawing-rooms. Perhaps the prettiest idea of all was the strewing of the stairs and carpets with the snowy petals as the bride and groom advanced to the altar, and the subsequent use of the blossoms

### To Remove Scorch from Linen

Unless the linen has been burned, the color can be restored by the immediate use of hot water. Rub the scorched places thoroughly with a cloth which has been dipped in hot water. After laundering a second time it will be found that the yellow has entirely disappeared from the linen. M. W.

### Linen Bands

Bands are taking the place of turn-overs, and are very effective as a finish for the neck and sleeves of a waist. They may be made of linen, prettily hem-stitched, or trimmed in fancy braid, or of scrim done in cross-stitch. Measure



LINEN BANDS

the length of the collar and cuffs before cutting the material, and make the bands long enough to meet when fastened on the waist. Fancy pins are very convenient for holding the bands in place.

MARIE WILKINSON.

### A Hand-Made Home-Made Parasol

The girl with nimble fingers can make herself a parasol which will be "a thing of beauty and a joy forever." She can do this at a very small cost and a little work if she possesses an old white silk parasol; if not, she can buy a cheap one, and cover as "per directions." If an old one is used, clean with gasoline, or soap and water. If the latter, scrub with a soft brush, and keep it open while drying. Carefully cut a paper pattern of one gore, allowing for small seams. Make as many patterns as there are sections in the



A RIOT OF BLOOM

as a substitute for the customary rice when the young couple drove away.

The stiffness of the sprays of peach and plum limits their decorative possibilities, but they are very lovely massed in slender vases, and it would be hard to imagine anything lovelier than a big bowl of crab-apple flowers, with their red-brown twigs showing up between the fragrant pink-and-white blossoms. Even the wild dewberry is most charming when the long, trailing sprays are gathered for the house, whether in bloom or fruit, and a fragrant bouquet from the old apple-tree is fairest of all.

MRS. HENRY WIGHT.

parasol, then lay these patterns on white cotton net, cutting exactly. Seam, and try on over the silk. Before joining mine I appliqued a flight of black lace butterflies cut from old lace. Pin them on and try the effect until it suits you, then sew to the net with fine black thread, and not a stitch will show when finished. Be careful when you place the net over the silk to have all the seams directly over the ribs. Turn under the lower edge, and sew to the silk; add a full ruffle of the net about three inches wide, with a small double net ruche as a heading; place a thicker ruche around the top of the stick, tie a bow of white ribbon on the

handle, and you can now raise your parasol with the confident feeling that you are the "envied of all beholders." Of course, you do not have to have butterflies. You may have any design that suits your fancy, or that you have in hand. A design of flowers—heavy around the lower edge, and growing lighter as they reach the top—would be beautiful.

I also made an entire parasol to match a gingham shirt-waist suit. I ripped up an old one that had a good frame, planned the sections carefully, and cut out my gingham, making all plaids match. These sections I seamed, hemmed the bottom, and sewed to the frame. You have no idea how easy it is until you try.

CAROLINE CRAWFORD.

### A Wild-Flower Luncheon

For an entertainment to be given late in May or in June nothing is more charming than a wild-flower luncheon. The invitations can be sent out on pieces of birch-bark daintily decorated with wild flowers and maidenhair ferns. For a green-and-white effect nothing is more appropriate than the shy, proud trilliums arranged with ferns and delicate trailing vines. Daisies also lend themselves to a green-and-white effect. The fragrant violets and the delicate blue blossoms of the forget-me-nots make appropriate decorations, as do the nodding bluebells. A low rustic basket about a yard in length and not more than five inches high makes a charming centerpiece for the table if filled with violets or forget-me-nots arranged in moss, as if growing. A square of birch-bark lapped and folded at the corners, and filled with trilliums and maidenhair ferns, also makes a pretty centerpiece.

To select partners for luncheon, let each lady select a flower from a bunch that contains no two alike, and give the gentlemen the leaves that belong to the flowers, asking each gentleman to search for the flower that belongs to his leaf. This will break up formality and bring the guests together.

The ices should be served in dainty paper-flower cases, choosing the flower that goes best with the other decorations. The sandwiches and fancy cakes should be in flower-shape.

After luncheon have a flower-guessing contest. Give each guest a piece of cardboard containing printed quotations relating to flowers, with the names of the flowers omitted, the guests being asked to supply them. A tiny pencil should be attached to each piece of cardboard by a long cord. The following quotations are given as suggestions:

1. "Think how the (daisy) draws her blind,  
And sleeps without a light."
2. "The sweet (forget-me-nots),  
That grow for happy lovers."
3. "The frail (bluebell) peereth over  
Rare 'broiery of the purple clover."
4. "O (kingcup) keep for me your yellow gold,  
Dropped from the warm June sun."
5. "Meadows of softest verdure,  
Purpled o'er with (violets)."
6. "All twinkling with the dew-drop sheen,  
The (brier-rose) fell in streamers green."
7. "The flowery May, who, from her green lap throws  
The yellow (cowslip) and the pale (primrose)."
8. "Fair (daffodils), we weep to see  
You haste away so soon."
9. "O'er worlds of green a scurrying swirl,  
Of golden discs and feather clocks,  
For Spring had raised her gates of pearl  
And loosed the (dandelion's) flocks."
10. "Tender-handed stroke a (nettle),  
And it stings you for your pains;  
Grasp it like a man of nettles,  
And it soft as silk remains."

The prizes can be a flower-decorated fan, a pin in flower-design, or a little pot containing a pretty growing plant.

PANSY VIOLA VINER.

### A Card of Thanks

FARM AND FIRESIDE desires to sincerely thank every one of its readers who have sent clubs of subscriptions, and asks a continuance of the same. Our readers will readily understand that taking into consideration the thousands of letters FARM AND FIRESIDE receives every day that it is next to impossible to write each a personal letter thanking them for favors. It is desired to impress upon your mind the fact that each and every little favor done FARM AND FIRESIDE by its readers is fully appreciated by the publishers. Let the good work go on and the million-mark be reached.



## Banner Lye



### How easy to use

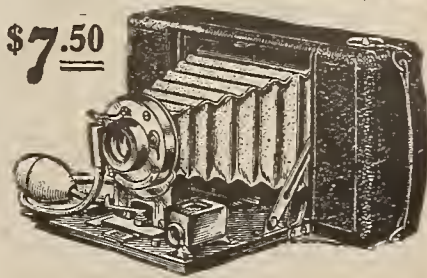
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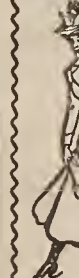
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## The Young People



### - DOLLY DOLEFUL -

DOLLY DOLEFUL is so dismal, in so very grim a way  
That it makes one blue to see her. She will never laugh and play.  
If you give an apple to her, how her face will lengthen out!  
Till you feel her tears are coming very soon, beyond a doubt.  
If you give her nuts or candy what a doleful face is hers,  
And you feel like asking pardon for the pain the gift confers.

DOLLY is so very dismal that the children run away  
From her long and mournful visage, "She will spoil our fun", they say.  
Then she sits down grim and tearful and you'd think her face to see,  
There was never one forlorn in the whole wide world than she  
And her Uncle Everjolly says that he believes it true  
That she never is so happy as when making others blue.

Once (but few believe the story, but I know it to be true)  
She so far forgot her dismal that she laughed before she knew  
What she was about. Her father was so frightened that he ran  
All the way to Doctor Doseum's and her mother sent a man  
After uncles, aunts and cousins and as I was passing by,  
She came out to tell what happened feeling sure that DOLLY'd die.

Doctor Doseum came to see her and he said he could not tell  
What effect it would have upon her, but perhaps she might get well  
So he gave her sage and senna, gave her ipecac and squills  
And a dozen horrid doses doctors give for human ills.  
And at last she quite recovered, but she has not laughed since then  
And 'tis altogether likely she will never laugh again.

How I wish that you could see her! If you didn't chance to know  
What the matter was with DOLLY, you would pity her I know.  
When her little city cousin came to visit her last Fall,  
Just the minute that he saw her he began to sob and bawl,  
And when some one asked the reason of the sympathetic lad,  
He replied that he was "sorry 'cause poor DOLLY felt so bad."

Deary me! You should have seen her when she heard what Tommy said!  
Such a look of doleful pleasure as her dismal face o'erspread!  
After that, when he was with her, she outdid her former powers  
In the art of looking dismal, and he'd sit and cry for hours  
And poor DOLLY missed him sorely when he had to go away  
For she so enjoyed his visit in her dismal doleful way.





## Sunday Reading

### Sunday at the Farm

On Sunday mornin's years ago, when but a little lad,  
I used to come to salt the sheep in this same field with dad.  
The little clouds that floated 'round I thought were bits of wool;  
The sky was blue as 'tis to-day, and calm and beautiful.

Now dad is gone, and mother, too; they lie up on the hill,  
Just by that clump of popple-trees beyond the old red mill;  
For Time has kept a-creepin' on, and you and I are men,  
And little Robbie thinks the thoughts that I was thinkin' then.

There's a brown thrasher in the tree that stands there on the knoll;  
Just hear the little tyke a-spillin' his immortal soul!  
Our preacher says that man alone has got a soul, but yet  
What pretty critters God has made, and loves 'em, too, I'll bet!

I know the city pretty well; I lived there once a while,  
But I was the homesickest boy you'd meet in many a mile.  
The very horses on the street looked sad, it seemed to me.  
There wa'n't no colts a-friskin' 'round, nor lambs, as I could see.

So when in June the breezes blew across the prairie West,  
I packed my grip and told 'em I had got enough, I guessed!  
Of course, there's city folks who keep their faith in God and man,  
Though if they stayed there all the while I don't see how they can!

We've had our troubles, wife and I, we buried little Dot;  
Upon that slope we made her grave—a green and sunny spot;  
And Death will never more to me seem terrible and grim,  
Since I have seen my little girl a-smilin' up at him.

And often now I come out here and set me down a spell,  
Where rustlin' leaves and wavin' grain seem whisp'rin' "All is well."  
I wish that all who'd like to feel their dead are safe from harm  
Could come out here and spend with me a Sunday at the farm.  
—F. L. Rose, in Chicago Herald.

### The Old Oaken Bucket

A young man of New England entered college. He was associated with other students in numerous wild pranks. One night they stood before the bar of a low drinking-saloon. He was the leading spirit of the party, and the man at the bar said, "Young man, you never tasted anything better than that in your life."

A poor, bloated, blear-eyed drunkard, half asleep, croaked out from his corner, "Except the water you drank from your father's well."

It was too much for the young man. He set down his glass, and asked to be excused. When next day the company met him, they did it by invitation, and he read to them his apology for having misled them. You have read it often, but perhaps did not know the connection:

"How dear to my heart are the scenes of my childhood,  
When fond recollection presents them to view;  
The orchard, the meadow, the green tangled wildwood,  
And every lov'd spot that my infancy knew.  
The wide-spreading stream, and the mill that stood nigh it,  
The bridge and the rock where the cataract fell,  
The cot of my father, the dairy-house by it,  
And e'en the rude bucket that hung in the well.

"The moss-covered bucket I hail as a treasure;  
For often at noon, when returned from the field,  
I found it the source of an exquisite pleasure,  
The purest and sweetest that Nature can yield;  
And now far removed from the loved situation,

The tear of regret will intrusively swell,  
As fancy reverts to my father's plantation,  
And sighs for the bucket that hung in the well."

—Dr. C. W. Sims, at Chautauqua.

### A Timely Invitation

A business man was on his way to prayer-meeting. His work had detained him so long that his dinner had been hastily eaten, and yet he was late for service. The sound of music floated down the street, and as the church came into view he quickened his steps. On the pavement he hurriedly passed a stranger, who was gazing curiously up at the open windows. Acting on a sudden impulse, he turned back. "This is our prayer-meeting evening. Will you go in with me?"

The stranger hesitated a moment. "Why, yes," he answered.

Prayer-meeting ended, the two went out together. "I was very glad to have company to-night," said the business man, as he parted from his new acquaintance, after finding out his name and where he lived. "May I call for you next Wednesday?"

The man, without much enthusiasm, replied that he "didn't care" if he did.

The business man called, and followed it up on succeeding Wednesdays, taking care to introduce the stranger to other men of the congregation.

That was the starting-point. Prayer-meeting led to church services. Finally the stranger, with his family, united with that congregation. He has become an active and efficient church-worker. "Do you know," he said to his friend, recently, "do you know, I had lived in your city for seven years before I met you. I had not been in the city three days before grocers and dairymen had hunted me up; within three weeks the politicians had learned my political preferences. Yet in all those years you were the first man who had ever said, 'Come, let us go into the house of the Lord.'"—Christian Herald.

### Gems of Thought

"All men have their frailties, and whoever looks for a friend without imperfections will never find what he seeks. We love ourselves notwithstanding our faults, and we ought to love our friends in like manner."

"There is no real courage unless there is real perception of danger. The man who does not comprehend the perils that surround him, and is therefore calm and collected, is not courageous; he is simply ignorant."

How shall we rest in God? By giving ourselves wholly to him. If you give yourself by halves you cannot find full rest. There will ever be a lurking disquiet in that half which is withheld.—Jean Nicolas Grou.

"Lead us not into temptation." No man was ever so far advanced in the divine life as not to need to utter these words. In fact, the holiest breathe this petition with the most frequency. And if an angel should be sent from heaven into the midst of us, it would be ever upon his lips.—George Bowen.

It little matters how carefully the rest of the lantern is protected, the one point which is damaged is quite sufficient to admit the wind; and so it little matters how zealous a man may be in a thousand things, if he tolerates one darling sin Satan will find out the flaw and destroy all his hopes.—Spurgeon.

When a man can willingly forego even the outward services of religion, and stay away from the House of God, and let the seasons of devotion and communion pass by without a thought of regret, his faith and love must be at a low ebb. A living plant seeks water; a living soul longs for the refreshment of the sanctuary.—Henry Van Dyke.

When Life has become our enemy, Death has become our friend. There is even soothing in that once cheerless voice. The way down into the valley may have its thorns for our feet and its pangs for our hearts, but it is a welcome path, after all. Why should we call Death our enemy when he conducts us into the presence of the immortal life and to the kingdom prepared for us from the foundation of the world? The entrance to our better life has been well called "the gate of pearl."

I cannot do without your valuable paper, and will try to get subscribers for you. FARM AND FIRESIDE as a farm paper can't be beat.

L. B. REENVY, Missouri.

## ARE YOUR KIDNEYS WEAK?

Thousands of Women Have Kidney Trouble and Never Suspect It.

WOMEN suffer untold misery because the nature of their disease is not always correctly understood; in many cases when doctoring they are led to believe that womb trouble or female weakness of some sort is responsible for their ills, when in fact disordered kidneys are the chief cause of their distressing troubles. Perhaps you suffer almost continually with pain in the back, bearing-down feelings, headache and utter exhaustion.

Your poor health makes you nervous, irritable, and at times despondent; but thousands of just such suffering or broken-down women are being restored to health and strength every day by the use of that wonderful discovery, Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy.

### Didn't Know I Had Kidney Trouble

I had tried so many remedies without their having benefited me that I was about discouraged, but in a few days after taking your wonderful Swamp-Root I began to feel better.

I was out of health and run down generally; had no appetite, was dizzy and suffered with headache most of the time. I did not know that my kidneys were the cause of my trouble, but somehow felt they might be, and I began taking Swamp-Root, as above stated. There is such a pleasant taste to Swamp-Root, and it goes right to the spot and drives disease out of the system. It has cured me, making me stronger and better in every way, and I cheerfully recommend it to all sufferers.

Gratefully yours,  
MRS. A. L. WALKER,  
46 West Linden St., Atlanta, Ga.

Not only does Swamp-Root bring new life and activity to the kidneys, the cause of the trouble, but by treating the kidneys it acts as a general tonic and food for the entire constitution.

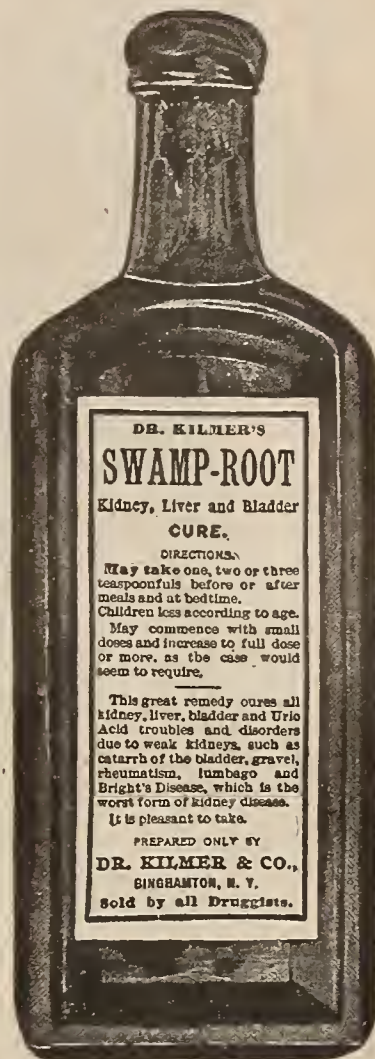
The mild and extraordinary effect of the world-famous kidney and bladder remedy, Swamp-Root, is soon realized. It stands the highest for its wonderful cures of the most distressing cases. A trial will convince any one—and you may have a sample bottle sent free by mail.

**To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy, Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail.**

**SPECIAL NOTICE.**—So successful is Swamp-Root in promptly curing even the most distressing cases, that to prove its wonderful merits you may have a sample bottle and a book of valuable information, both sent absolutely free by mail. The book contains many of the thousands upon thousands of testimonial letters received from men and women cured. The value and success of Swamp-Root is so well known that our readers are advised to send for a sample bottle.

In writing to Dr. Kilmer & Co., Binghamton, N. Y.; be sure to say that you read this generous offer in the FARM AND FIRESIDE.

Swamp-Root is pleasant to take, and you can purchase the regular fifty-cent and one-dollar size bottles at the drug-stores everywhere. Don't make any mistake, but remember the name, Swamp-Root, Dr. Kilmer's Swamp-Root, and the address, Binghamton, N. Y., on every bottle.



(Swamp-Root is pleasant to take.)

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Send for it to-day  
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BOX-PLAILED ETON AND NINE-GORED FLARE SKIRT

## Shirt-Waist "Tub" Dresses

THE shirt-waist "tub," or wash, suit is more popular than ever this year. Several pretty styles are herewith illustrated.

## Plain Shirt-Waist and Seven-Gored Skirt

This shirt-waist suit is of linen, with straps of the linen and rows of stitching for its trimming. The shirt-waist is plain, with the long-shouldered effect emphasized by a strap, which reaches from the neck-band over the top of the sleeve.



SHIRT-WAIST WITH CAPE-YOKE AND NINE-GORED SKIRT WITH DOUBLE BOX-PLAIT

The waist has a plain French back and a bi-hop-sleeve with a double-tab cuff. The plain seven-gored skirt is made with stitched seams and inverted plaits at the back. Two buttoned-over tabs are used to ornament the front of the skirt. In white linen, with the stitching in dark blue, or in dark blue linen, with the



## How to Dress

stitching in white or red, this little dress would be smart-looking. The pattern for the Plain Shirt-Waist, No. 282, is cut for 34, 36, 38 and 40 bust measures. The pattern for the Seven-Gored Skirt, No. 283, is cut for 22, 24, 26 and 28 waist measures.

## Box-Plaited Eton and Nine-Gored Flare Skirt

For comfort and convenience there is nothing better than this two-piece "tub" suit. It is made with a box-plaited Eton, to be worn over a shirt-waist, and a fashionable shaped skirt. The Eton is double-breasted, with two box-plaits at each side of the front, which are trimmed with stitching to give the effect of straps. The Eton ends four inches above the waist-line. Below the Eton a deep fitted girdle shows. The three-quarter-length sleeve has a graceful bell effect below the elbow, and like the Eton, has a partly stitched-down box-plait. The flare skirt, with its stitched seams, has a box-plait at the center back trimmed with rows of stitching. The skirt is made in step-length. The pattern for the Box-Plaited Eton, No. 289, is cut for 32, 34, 36, and 38 bust measures. The pattern for the Nine-Gored Flare Skirt, No. 290, is cut for 22, 24, 26 and 28 waist measures.

## Tucked Shirt-Waist and Tucked Instep-Length Skirt

Though this shirt-waist suit is simple in design, it has a special chic style of its own. Any of the good-wearing cotton



EMBROIDERED STOCK COLLARS

materials may be selected in making it. Canvas, crash, cotton etamine and momie-cloth would all be excellent materials to use. The shirt-waist is made with a narrow box-plait down the front, with three tucks at either side stitched down to the bust-line, and then having the fullness let out. The back is made with two tucks at either side of the center back. There is a shoulder-yoke, and the bishop-sleeve is made with two tucks to simulate a box-plait, and is finished at the wrist with a band cuff. The tucked instep-length skirt is made with a graduated box-plait down the front. The rest of the skirt, back and front, is laid in tucks, which are stitched down just below the knees, and then the fullness is allowed to flare prettily. The tucks may be stitched in the same color as the material, or in a contrasting shade of mercerized thread. The pattern for the Tucked Shirt-Waist, No. 285, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Tucked Instep-Length Skirt, No. 286, is cut for 22, 24, 26 and 28 waist measures.

## Shirt-Waist with Cape-Yoke and Nine-Gored Skirt with Double Box-Plait

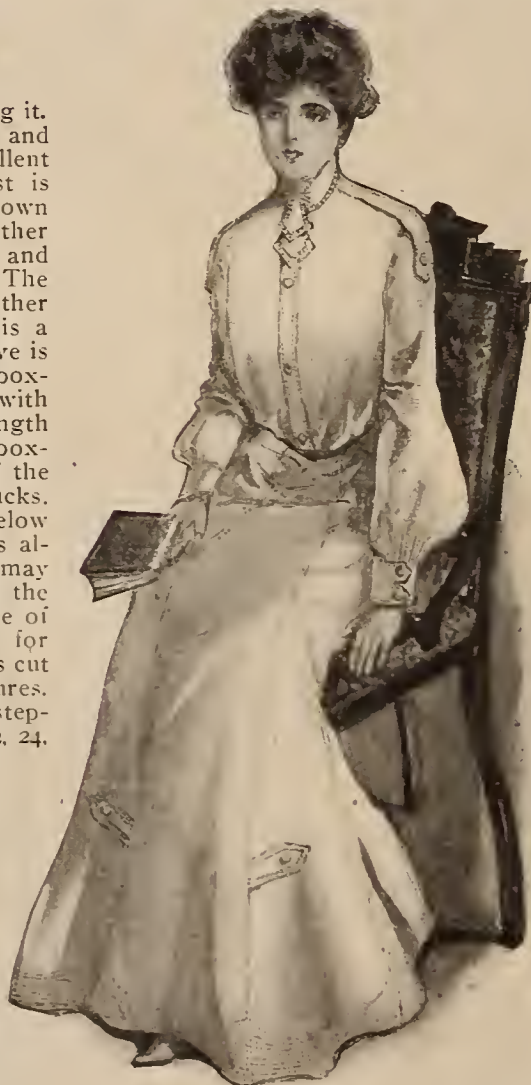
This good-looking shirt-waist suit is warranted to give any young woman a smart, up-to-date look. The shirt-waist is made with a deep cape-yoke, which gives the long-shouldered effect. The yoke is the same back and front. The sleeve is the very new modified leg-o'-mutton with a deep fancy cuff. A double-stitched box-plait is used for the front of the shirt-waist, and another takes away the plain look from the center back. The waist is but slightly bloused, and has a little buttoned-over pocket on the right side. The nine-gored prettily flaring skirt is made with a double box-plait down the front. The back is made with inverted plaits, and the skirt is cut in the convenient instep-length. Any of the fancy canvas suitings would make up well in this costume, or cotton damask, mercerized gingham or figured piqué. The pattern for the Shirt-Waist with Cape-Yoke, No. 287, is cut for 34, 36, 38 and 40 bust measures. The pattern for the Nine-Gored Skirt with Double Box-Plait, No. 288, is cut for 22, 24, 26 and 28 waist measures.



TUCKED SHIRT-WAIST AND TUCKED INSTEP-LENGTH SKIRT

## Embroidered Stock Collars

The linen collars and cuffs that are now being so much worn are nearly all more or less ornamented with embroidery and hemstitching. One of the collars herewith illustrated has little sprays worked in satin stitch with soft white



PLAIN SHIRT-WAIST AND SEVEN-GORED SKIRT

cotton in each point, the edge being finished with a row of hemstitching. The patterns for these five Embroidered Stock Collars under the one, No. 2032, are cut in one size only, and the five patterns are offered for ten cents.

## PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.

## Frocks for Smaller Folks

## Ruffled Dress

The small girl as well as her mama has ruffles on her frock this summer. This little dress is made of batiste and fine lace insertion, or it may be made of



RUFFLED DRESS

any pretty novelty cotton goods and embroidery insertion. Though all white is generally preferred for a frock of this sort, yet a dainty touch of color may be introduced by having the material white and the fine embroidery worked in some delicate pretty color. The pattern, No. 297, is cut for 4, 6 and 8 years.



DRESS WITH 1830 COLLAR

## Dress with 1830 Collar

This attractive little dress is made of blue chambray with the deep bertha-collar of white linen and Hamburg insertion. The pattern, No. 295, is cut for 4, 6 and 8 years.



BOYS' SMOCK

## Boys' Smock

Crash, duck and Holland linen are all good materials to use for this little suit for a small boy. Rows of stitching form the trimming, and the belt, which should be well pulled down, is of black patent-leather. The pattern, No. 296, is cut for 2, 4 and 6 years.



## Prize Puzzles

We Want to be Neighborly, and so Invite all of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.



### THE UNITED STATES CITIES PUZZLE

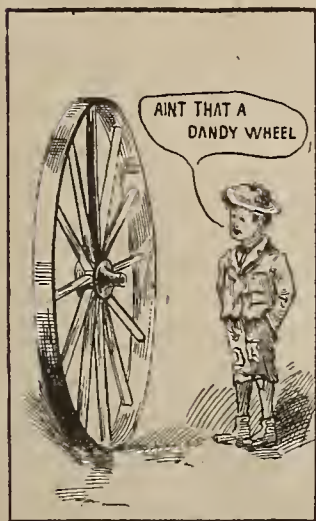
Here are Six Pictures, Each Representing a City in the United States. Can You Make Out the List?

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before June 1st.

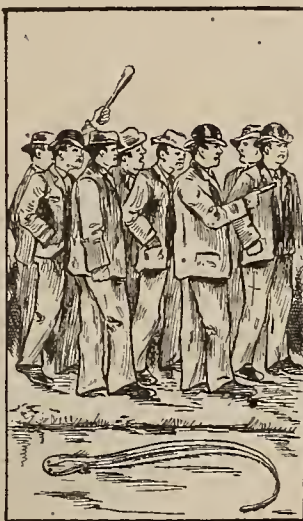
#### ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a picture entitled "Queen of Flowers" will be given for the first correct list of answers received from each state and territory. This means a picture for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize,

giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the pictures will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.



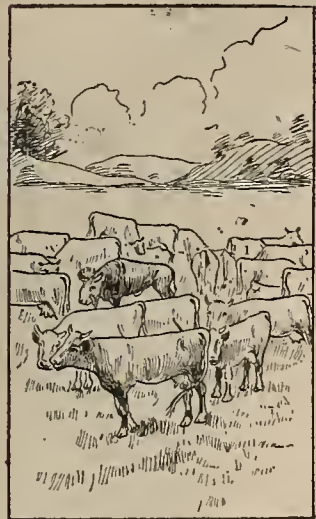
1



2



3



4



5



6

#### ANSWERS TO PUZZLES IN THE APRIL 15th ISSUE

- |               |               |
|---------------|---------------|
| 1—Idaho.      | 5—Maine.      |
| 2—Indiana.    | 6—Maryland.   |
| 3—New Jersey. | 7—Tennessee.  |
| 4—Illinois.   | 8—Washington. |

The cash prizes are awarded as follows:  
Man's cash prize, two dollars—H. W. Francis, Chicago, Illinois.  
Woman's cash prize, two dollars—Mrs. Horace J. Rollin, Piqua, Ohio.  
Girl's cash prize, two dollars—Margaret S. Culpepper, Elizabeth City, North Carolina.  
Boy's cash prize, two dollars—Edmund Silberbush, Goode, Virginia.

As a consolation prize an "Atlas of the World" is awarded the following persons, whose lists were the first to reach us from their respective states:

Alabama—Nannie Lou Bates, Plevna.  
Arkansas—Mrs. R. C. Beavers, Little Rock.  
Arizona—Mrs. H. Wilson, Flagstaff.  
Canada—{ Ontario—Arthur Perdue, Campbell's Cross.  
Quebec—Isabel Meldrum, Hull.  
California—Myrta Metzner, St. Helena.  
Colorado—Clifton R. Curtis, Glendale.  
Connecticut—E. Ruth Barnes, New Haven.  
District of Columbia—May E. Weirick, Washington.

Florida—Fred Revels, Dade City.  
Georgia—Bessie Anderson, Brunswick.  
Idaho—Etta Estes, Nezperce.  
Illinois—Bessie Parker, Chicago.  
Indiana—Mrs. Eve A. Sisson, Dunreith.  
Iowa—George R. Horn, Fairfield.  
Kansas—Emma Kouns, Salina.  
Kentucky—Jessie Henton, Frankfort.  
Louisiana—Daisy White, Crowley.  
Maine—E. W. Jones, North Fryeburg.  
Maryland—Dallas P. McAttee, Darnestown.  
Massachusetts—Clifford Sharley, Pittsfield.  
Michigan—Jerome Trombley, Petersburg.  
Minnesota—Hortense Worden, Fisher.  
Mississippi—Wesley M. Bailey, Lexington.

Missouri—Rexford L. Holmes, St. Louis.  
Nebraska—Harry A. Linn, Tablerock.  
New Hampshire—Mrs. James E. Allard, Reeds Ferry.

New Jersey—Bessie Matilda Wilson, South Boundbrook.

New York—Frances L. Linn, Albion.  
North Carolina—Mrs. J. P. Turbyfill, Charlotte.  
North Dakota—Mrs. F. R. Stevens, Hillsboro.  
Ohio—Florence Wright, Sidney.  
Oklahoma—Mrs. L. R. Watson, Apache.  
Oregon—Edward Morton, Portland.  
Pennsylvania—Maude L. Haswell, Colwyn.  
Rhode Island—Katherine D. Salisbury, Bristol.  
South Carolina—J. L. Rochie, Abbeville.  
South Dakota—Lillie Strange, Bancroft.  
Tennessee—Irby Quimby, Martin.  
Texas—Lucielle Dashiell, Fort Worth.  
Vermont—Myron H. Shaw, Colchester.  
Virginia—Belle C. Jobe, Brucetown.  
Washington—C. E. Wagner, Satsop.  
West Virginia—Mrs. V. M. Greynolds, Beverly.  
Wisconsin—Lois M. Goldsworthy, Uniongrove.

#### Conundrums

What most effectually checks a fast man? A bridal.  
What tree bears the most fruit to market? The axle-tree.  
At what time of day was Adam born? A little before Eve.  
Why is beef suitable for a Christmas dinner? Meet for rejoicing.  
What affections do landlords most appreciate? Parental (pay-rental).  
What is the color of a grass-plot covered with snow? Invisible green.  
Why did Adam bite the apple Eve gave him? Because he had no knife.  
What word by changing one letter becomes its opposite? United—untied.  
When is a lawyer like a beast of burden? When drawing a conveyance.  
Why is a pig with a curly continuation like the ghost of Hamlet's father? Because he could a tale unfold.

Local agencies and complete repair stocks everywhere

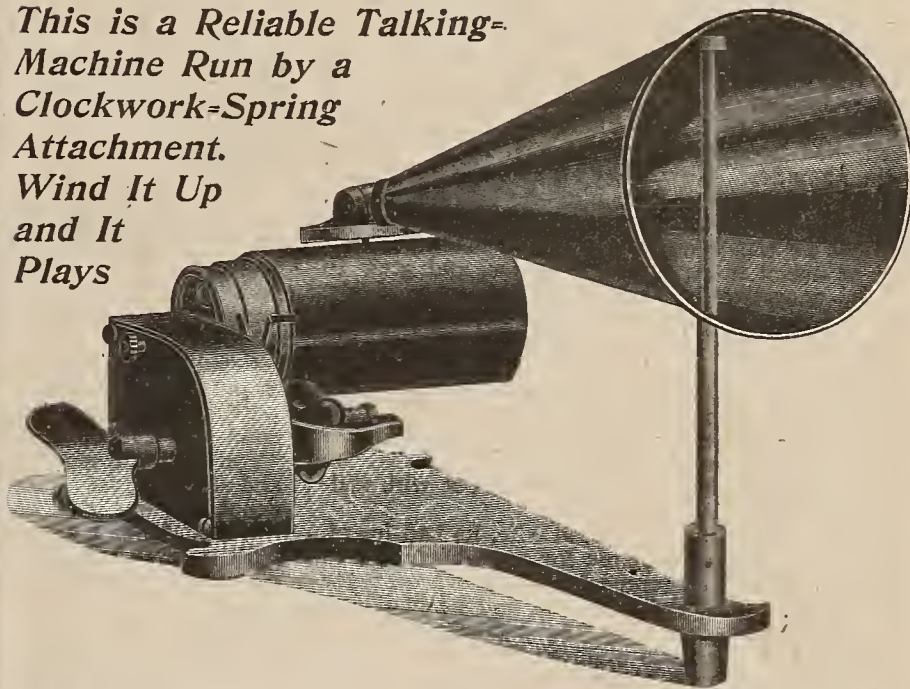
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## A FIRST-CLASS TALKING MACHINE WITHOUT COST

(Manufactured by The Columbia Phonograph Company) of New York City

This is a Reliable Talking-Machine Run by a Clockwork-Spring Attachment. Wind It Up and It Plays



## A Columbia Phonograph

This is a genuine talking-machine, playing all the music that is produced on the high-grade, expensive phonographs. It winds with a key, and runs by means of a spring motor—you don't have to turn a crank, as is the case with cheap talking-machines.

**The machine is guaranteed by The Columbia Phonograph Co.**

to be exactly as represented and to give good satisfaction. It takes identically the same records as those which are used on

### A \$50.00 Machine

The tones are loud and clear, and it is just the thing for home entertainments and to play out on the porch in summer evenings. It is a good all-round machine, and bound to give good service. The machine is sent to you complete, with music, horn, everything ready to wind up and start; it sings, laughs, plays all kinds of difficult music. When we send you the machine we will tell you how to secure all the new records and whatever kind of music you like without cost.

## How to Get This Excellent Talking-Machine FREE

Send us your name and address on a postal-card to-day. We will send by return mail eighteen coupons, each one of which is good for a year's subscription to one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself. You sell these coupons to your friends and neighbors at 25 cents each. They will gladly take advantage of a chance to get a good paper one year for 25 cents. When the coupons are sold, you send the \$4.50 to us, and we will forward the talking-machine, together with music. If you don't want a talking-machine, perhaps you know of some boy or girl who would like to earn one. If so, send us the name and address, and we will send offer by return mail. Many have earned talking-machines by our plan, and you can do it in one day's time. Write to-day.

Address FARM AND FIRESIDE, Springfield, Ohio



## PART II.

THE doubt and suffering of that night hour were recalled the next morning when Joel dressed. Almost the first thing he felt for was Allie's letter. It was not in his coat-pocket, where he had placed it. While Amanda was in the shed gathering chips for their breakfast fire, Joel unlocked the little drawer in his desk. There he found the letter at the top of the small packet. Amanda had made the fatal mistake of including it with the others when she returned them, after vainly searching for evidence to prove him in the wrong. Though convinced now of her perfidy, he did not experience in the clear light of early morning that deadening effect which mere suspicion had given in the night-time. Nevertheless, a veritable revolution took place in both his attitude and feeling toward his wife.

Amanda found him unusually silent during the morning meal, nor would he meet her eyes. She had her own explanation for this. Allie had written that Harry was coming home for a short visit. "But don't tell me; he wants to surprise her," the stolen letter had said, and she crassly imagined it was this secret that preyed upon his mind. "He's disappointed and jealous 'cause 'tain't Allie comin'," she chuckled, immoderately. The situation was all the more delectable, as Harry, in the same manner, had written to her: "Allie will be there Saturday. She wants to surprise father, so don't let him see this letter."

Knowing that both their children would soon be home, Amanda began to put things to rights for a fine welcome. With one pretext or another she excused her busy preparations to Joel, who, keenly alive to her faults now, winced under the deceit she found so easy to practise. He never dreamed that Allie was coming, too. He wished he knew what Harry had written, but would not ask to see the letter, for he could not show his own from Allie—though it no longer contained a secret since Amanda's reprehensible act.

Joel plunged into the farm-work, hoping somehow to mend the shattered confidence in his wife. When this seemed impossible, he tried to forget the matter. "Harry is coming home!" he would repeat, and try to feel elated; but instead there rose that depressing picture of the night, burned into his memory by the flaming lamp. Vain to argue it was a little matter, for it was the sort that sorely nettled his punctilious nature, and brooding magnified the trouble a hundredfold.

Thirty years he and Amanda had been married. During that time they had had many disputes—not to say quarrels—but through all she had retained his honor and respect. Their differences heretofore, he believed, had been open and honest, as men strike from the shoulder. Now, after all these years, to feel his trust in her slipping from him—he had not known its value before! Alone in the field he groaned aloud.

Because he was keeping something back, Joel felt a sense of deceit in Amanda's presence, and grew to prefer the company of creatures in the sunny fields. He fell to living over the early years of their married life—years that, with small demonstration of love and plenty of hard work, had nevertheless been filled with confidence and hope, which bring happiness. He had often failed to understand his wife. But moments for reflection were rare then; now he had all the time in the world to think, and it was because of this that the recent revelation in her character stood out with sudden and overmastering prominence.

A good husband makes a good wife, he had heard. Was he not, perhaps, to blame for any shortcomings she might exhibit? In comparing the years with one another, Joel realized that Amanda and he had long been drifting apart, and that the current had woefully accelerated since the children left home. Such troubled thoughts made him absent-minded at meal-time and during the long evenings, and filled him with confusion when Amanda spoke his name.

On Saturday morning, excited as the hour approached when the children would arrive, Amanda made a misstep that precipitated her bulky form down a short flight of stairs. Fortunately Joel was near, and sprang at once to her side.

"Have you hurt yourself, Mandy?" he asked, his voice vibrating with immediate alarm. "Let me help you. Let me get my hands under your arms—so!"

She was a heavy load for her lean and aged spouse, but Joel succeeded in getting her to a couch, and then ran to the cupboard for some cordial. It soon developed that the services of a physician were required, however, and in that moment Joel forgave his children for insisting on having a telephone in the old home. He did not stop with summoning Doctor Carton, but called up Mrs. Melker, who was on their line, and begged her to come, also. Joel was afraid Amanda was going to die.

But fate had no such grim intention then. Amanda's hip had received a painful strain, and her whole system a great shock, the doctor said. Perfect quiet for a period of ten or twelve weeks would be required to heal her injuries.

"It looks like you'd have to hire a housekeeper, Mr. Wedowfield," said Mrs. Melker, bustlingly practical under every circumstance. "I wonder if you couldn't get Effie Bolsome."

Joel remembered then that Harry was coming home that afternoon. "If it was only Allie, now!" he sighed; but aloud he said, "I'll go an' see Mrs. Bolsome. I've got to go to town anyway." It was in deference to Effie's fifty years that Joel said "Mrs.," for no one had ever led her to Hymen's altar.

Mrs. Melker, habitually exact, caught the unearned title, and corrected him. "Miss Bolsome—Effie! You know who I mean?"

"Yes, I know," returned Joel, with the impatience of a troubled man, but really failing to understand the correction in spite of its evident accent.

"Who knows but it may be Effie's last chance!" reflected Mrs. Melker, with her readiness to meet the future, and losing nothing thereby of her kindly feeling for the injured wife, who had long been a good neighbor. She was watching heavy-hearted Joel drive from the yard on his errand to town, and thinking how the

## Cupid Plays Rip Van Winkle

By ALBERT LATHROP LAWRENCE

carriages would be hitched among the trees and along the fence in case of a funeral. Could she have known of his soul's rebellion at the thought of a strange woman in the house, going and coming in Amanda's place as it must seem, she would have realized how very foolish was her hasty contemplation.

"If it was only Allie, now!" Joel sighed again; and then, as he was in town, he resolved to meet Harry's train, though Allie's letter had expressly told him not to do this.

In spite of his stooping shoulders, Joel's head rose above the others as he waited at the station. He saw Allie on the platform of the car before the train stopped, and like a famished wolf, rushed for the spot where she must alight. Joy there would have been anyway, but now in addition was sudden relief from many burdening difficulties.

"But I told you not to come," Allie cried, laughing joyously, swinging his hand with happy abandonment. They were taking a second look at each other, their eyes coming and going bashfully from the damp cheek where kisses had been left. "I'm just provoked at you!" she added, with a frown. "Harry and I thought it would be just fun to surprise you both, but we thought you and ma would enjoy it more if each could be in the surprise on the other. Where is ma?" she asked, darting her eyes about. "Does she know Harry is coming, too? I'll bet you couldn't keep it from her! You had to tell!"

Joel's brow clouded with more than a single perplexity. "Your ma fell an' hurt herself," he said, sorrowfully, forgetting twenty of Allie's years, and speaking as when he stooped and patted her on the head.

The anxiety of both children saved him from Allie's troublesome questions, and as they drove home, to prevent any repetition, Joel explained in detail Amanda's fall, Doctor Carton's visit and verdict, and that Mrs. Melker was staying at the house until he should get some one else—Effie Bolsome, perhaps.

"Oh! Then you didn't expect me!" cried Allie. "I thought you acted awfully queer at the depot!" She was pleased that her plans had not wholly miscarried. "Ma can keep a secret better than you," she reproached, while punishing him with tender pats on the back.

A troubled silence promised to be Joel's only reply, but he pulled himself from the current into which her words had unwittingly plunged him. "Yes, I was surprised," he declared, earnestly. "I wa'n't expectin' you. But I was wishin' you was here. You don't know how I wished it!"

Joel did not enter the house with the children, but insisted on Harry going with Allie, while he remained to put out the horse.

"Oh, you deceitful man!" was the way Allie pounced upon him the moment he appeared in the bedroom. "You told me ma knew all about Harry's coming—and she was just as much surprised as you was at the depot!"

"No, Allie, I didn't tell you that," Joel answered, with greater solemnity than his part seemed to demand. He had feared Amanda would take the rôle she had; because of this he had purposely avoided being present during its enactment, his mind divided between disapprobation and a feeling that he should betray her by a too open countenance. "I jest left you to think what you was a mind to," he explained, his face averted under pretense of finding a chair.

"Oh, he's a sly one—our pa, ain't he, ma?" Awe and disapproval were prettily dramatized in Allie's fresh young face.

Harry, seated on the further side of the bed, was holding his mother's hand, and declaring what a shame that she should have to lie there. But under the doctor's medicines and the excitement of the moment Amanda was free from pain, and strangely happy and contented. Mrs. Melker, no longer needed, yet reluctant to break into the happy reunion and ask for her horse, came and went, ignored by all until Joel perceived her, and remembering his indebtedness and the rapidly approaching night, sprang to do her bidding.

It was a shame, she protested with all her volubility once they were in the yard, to take him one minute from his children. But she was so glad Allie had come! She boasted that the moment Joel had left the house in the afternoon Amanda had told her both Harry and Allie were coming. Had he had no suspicions at all? And wasn't it truly fine how Amanda, knowing all, had pretended, just to save the children's enjoyment?

Joel was trying bravely to forget the grievance against his wife. Here it was again—deceit under another form—thrust into his face! How much better if he could take Mrs. Melker's view of the matter, he thought, giving it kindly consideration for the moment. But Amanda's previous action—that night scene, memory of which came like a bitter draught to be swallowed again—caused him to hasten back to the house for a taste of Allie's society, believing it alone could sweeten his mouth.

Only the mother's injuries prevented them from being perfectly happy, the children declared oftener than anything else during their visit. Harry had intended to return to his business on Monday night, but he lengthened his stay now by twenty-four hours. He spent a great deal of time in the little bedroom off the dining-room, sometimes sitting on the bedside, sometimes in a chair before the window, with the city paper in his hands, but ready to drop it the moment his mother spoke. Joel and Allie sat about the dining-table when work did not demand their attention elsewhere. From these positions, by slightly raising their voices, the four could make their conversation

general when they chose. The parents led in asking questions, and little by little the children colored the picture which their letters had outlined in black and white of their separate lives in the different cities where they had gone to dwell.

The excitement of their presence in the house robbed Joel and Amanda of no little sleep, and as they lay awake in the night they talked over the day's revelations. That Harry was wholly absorbed in his business, as Allie's first thought was of her husband and the new home she was making, became painfully evident. Joel, the more sensitive one, was the first to feel this change in their children, and from Allie, too. She had never said how long she should stay, but it was understood that the reasons for her early return were not imperative, as they had seemed in Harry's case. Allie had taken up the housework, pushing it forward with a dash that imparted flavor of her young life and personality. Joel's relief was infinite, as he blindly thought she would remain until her mother was quite recovered. It came, therefore, as a shock when she suggested on the fifth or sixth day of her visit that he had better see Effie Bolsome, and engage her services before they were hired elsewhere. Joel straightened in his chair, and stared at his daughter.

"You know I can't stay always, pa," she said, hurrying forward, for she was prepared to meet his keen disappointment. "Ma is getting along nicely, and with Effie you won't need me longer than next week. I'll be staying then twice as long as I promised Hamilton I'd be gone."

"But, Allie—" he began.

Then they had their little argument—her tone light as she scoffed at any real need for her services, his voice quivering at times with a feeling that was hard to keep under. It ended in a tacit postponement of the question; but Joel knew he had lost, and Allie wrote her husband that evening just when she would be home.

That night Joel awoke with a painful sense that Allie had failed him. The moon was shining through the east window on his little desk, and its light there recalled another shock still fresh in his memory. Such repeated bitterness in the midst of an existence that had its contrasting joys puzzled him.

This mystery of life came to him often thereafter, with now and then a moment when he seemed to be on the threshold of an understanding. The most trivial things led to this—as when Black Moll drove her yearling, from a bundle of juicy corn-stalks which he had tossed into the field. There was selfishness for you, Joel thought. And once she had charged upon him in defense of Little Spot, now nearly as large as herself. In another year the tables would be turned. Since this was the law of life, why should he blame Allie?

Harry surprised them all by making a second trip home two weeks after the first, and so the four were together over another Sunday. Amanda was feeling so well she would have Joel and Harry move her to the couch in the dining-room, where she spent the day. Learning that Allie was intending to leave on the morrow, Harry burst out with indignation, and they argued the matter between them, he sparing her not at all. But when Joel entered the dispute, taking Allie's part, and speaking hopefully of how "ma and me" would get along, Harry gave up the contest. Then he and Allie contended that Effie Bolsome should be hired forthwith, but so stubbornly did Joel resist their arguments, his wife joining him, that this, too, was at last abandoned.

"Females hain't no sense o' honor—leastwise not much judgment. They're all emotion!"

Joel was leaning on the fence-bars, staring blankly into the field where Black Moll and her companions were grazing. He had just relieved one of the cows of a stone which had become wedged in the parting of the hoof, and the animal mistaking his efforts, blindly associating him with her pain, had fought him most viciously. However, he was not thinking of this so much as of Allie and her mother, trying desperately to formulate something that would throw light into the benighted regions of his own understanding.

The children had taken the train together that morning, as they had come at first, and Joel and Amanda were once more alone. Joel had had his way in spite of Allie's tears and hysterical protestations at the last that they must send for Effie Bolsome. He had promised, however, to call in a neighbor's girl of twelve when it was necessary to leave Amanda for any length of time.

"You can't keep 'lasses an' ker'sene in the same jug, an' the Lord knowed it when he made 'em."

Joel was still pondering on the mysteries of the other sex—a problem he was never to grow weary of nor never solve. Harry had shown his manliness by a second visit home, and the "sweets" in Allie's nature rightly belonged to another. The feeling of disappointment in his wife was slowly giving place to benevolence. He must accept natural limitations. Amanda had made a good mother to his children; with swelling heart he recalled her tireless ministrations during many a serious illness. She would have died for them, he knew. Cupid, after twenty years' sleep, was slowly awakening.

Despite the baking which the neighbors did, the work indoors and out kept Joel pretty busy; still he never regretted that Effie Bolsome was not hired. The days flew rapidly, and Amanda steadily improved. For a time the letters from the children continued with their old regularity. Then Allie's Tuesday letter did not reach them until Friday, and the next was not written until a week from the following Sunday. Joel was not surprised, for he had anticipated this, as he foresaw there would be increasing irregular intervals in the future.

Some time since he had given up keeping Allie's letters in his own desk, under lock and key. The first Sunday after Amanda got freely about the house they had had both packets out, and when through with them Joel had pushed his across the table to her. "Keep 'em all together, Mandy," he had said, with simple confidence. "Tain't right that they should be



separate. The children are equally mine an' your'n—an' their letters."

Amanda looked as if she might take some exception to his proposal, but as the guardianship of the letters was intrusted to her, any protest would have seemed absurd.

As the evenings grew longer, and they sat about the lighted lamp, Joel less and less frequently left her to go alone to his bed. He read a little with "The Christian's Weekly" before him, but much of the time he looked above its pages to the face opposite, plump in spite of years and gray hair. If he ever thought now of the night when he awakened to find Amanda before his desk, it was with a glad feeling that she knew nothing of the circumstances. The very inconsistency of her complex nature was becoming dear to him.

Sometimes pacing the floor, he would come and stand behind her chair, ask her what she was reading, and perhaps direct her thoughts to the long, long ago. Thus he stood one night after the receipt of a very particular message from Allie. No jealousy was in his heart, though the letter had come to Amanda, and she was going soon to be with Allie through an approaching crisis. They were reading the words together for the hundredth time, when Joel, in happy excitement, tossed "The Christian's Weekly" upon the table. The flight of the paper extinguished their lamp.

"Now you've done it, Joel Wedow-field!" cried Amanda, yet with a note of endearment in her very displeasure. She would have risen, but his hands were on her shoulders, keeping her down. His laugh had a very boyish ring in the dark. Slowly he forced her face back, stooped, and kissed her like the bashful lover he had become.

"Gran' ma!" he breathed, experimentally.

#### A Vision Materialized

BY M. ELLEN HUBBARD

The sun rose bright and warm that fair May morning to welcome in Memorial Day. The birds sang in the orchard croft their sweetest notes. The fresh breeze stirred the roses in the garden and shook the dew from the borders of forget-me-nots and mignonette. It lifted the gray hair on the temples of a woman gazing with tear-dimmed eyes into the basket of red and white roses and blue forget-me-nots that she had gathered to lay in tender memory upon the last resting-place of one who had loved those colors, even to the offering up of his life in their service.

But that was years ago. She remembered how, in another garden in that other time, she had gathered a bouquet of red, white and blue, and he had carried it away, precious memento of the girl he loved. Three years later, when he came home to her, she found in his wallet the withered flowers.

"My blue-eyed Forget-me-not" he loved to call her.

"Dear Richard," she thought, "I wonder if he is lonely for me up there. I am very sure he is waiting, but not alone. God grant that we are soon a united family."

The tears fell afresh; but they were not for him of that other war, but for one whom they called "Little Dick." She had lived and loved for his sake, her little son; but again her country called, and she gave her all. She had been brave, as Richard would have wished.

"How proud I am of my soldier-boy," she said.

"Not half so proud as I am of my soldier-mother," he answered, as he marched away.

Only a few short weeks before this fair May day word came that he had fallen in battle. Her Little Dick among the slain! The mother's grief was pitiful, and now she is arranging a second bouquet, nursing in her heart the chill comfort that some day his body may be returned to rest beside the father's, where, too, she hopes to lie.

"My grief is making me selfish," she thought. "There is Alice, poor child! She must find another lover. Dear child! She begs only to cling to me. Was ever one more fortunate since Ruth left all to follow the footsteps of Naomi?"

Her floral offerings arranged, the widow took from her bosom two pictures. They were her constant companions save when Alice's warm arms around her neck recalled her to this world. One was of a man, tall and bearded and broad-shouldered, in the blue and gold of a Union officer; the other was of a fair young man, blue-eyed like his mother and broad-shouldered like his father—her little son in spite of his years and inches.

Her reverie was interrupted by a step upon the walk. She looked up. Her gaze was fixed as one in a vision, for there at the gate was a man broad-shouldered and bearded, in the blue and gold of a Union officer. Had the years rolled back and the time between been a dream?

"Richard, my own sweetheart!" she breathed, trembling in ecstasy, expecting to hear in the old, fond way, "My little Forget-me-not;" but when he spoke it was the one blest word, "Mother."

The vision fled. With a cry of joy akin to agony she fell upon his neck, crying, "My son, my son!"

Explanations followed. He was left for dead upon the field, but after months of suffering in native villages, he had been released and sent home.

It was now his turn to ask questions. "Does Alice still—still—" he began, but broke off with "Mother, why don't you tell me?"

"She will tell you for herself," answered his mother, pointing toward the orchard, where the flutter of a white dress could be seen through the lacery of leaves.

"Alice, my little sweetheart!" he cried, as he bounded down the path that led to the orchard.

The widow turned face downward in her lap the picture of the young man—she had no need of that substitute now—and taking the other in both her hands, she said, in sweetest notes of joy, "He has come home, dear Richard! He has come home to Alice, as you came to me!"

#### The River of Time

Oh, a wonderful stream is the river Time

As it runs through the realm of tears,

With a faultless rhythm and a musical rhyme,

And a broader sweep and a surge sublime,

As it blends with the ocean of Years.

How the winters are drifting, like flakes of snow,

And the summers, like the buds between,

And the year in the sheaf—so they come and they go,

On the river's breast, with its ebb and its flow.

As it glides in the shadow and sheen.

There's a magical isle up the river Time,  
Where the softest of airs are playing;

There's a cloudless sky and a tropical clime,

And a song as sweet as a vesper chime,  
And the Junes with the roses are staying.

And the name of the isle is Long Ago,

And we bury our treasures there;

There are brows of beauty and bosoms of snow;

They are heaps of dust—but we loved them so!

There are trinkets and tresses of hair.

There are fragments of song that nobody sings,

And a part of an infant's prayer;

There's a lute unswept, and a harp without strings;

There are broken vows and pieces of rings,

And the garments that she used to wear.

There are hands that are waved, when the fairy shore

By the mirage is lifted in air;

And we sometimes hear through the turbulent roar

Sweet voices we heard in the days gone before,

When the wind down the river is fair.

Oh, remembered for aye be the blessed isle,

All the day of our life till night;

When the evening comes with its beautiful smile,

And our eyes are closing to slumber a while,

May that "Greenwood" of Soul be in sight!

—Benjamin F. Taylor.

#### The Pyramids and the Electric Light

The darkness that has pervaded the Pyramids for thousands of years is now to be dispelled by the electric-light. Maspero, the director of the society intrusted with the preservation of Egyptian antiquities, has begun work on the historic temple of Karnak at Thebes. So successful has been the result that the inner passages and catacombs of the great Pyramids are now to be lighted.—McCall's.

#### Full Value

FARM AND FIRESIDE is really giving more for the subscription price than any other farm and family paper published. One year, twenty-four big numbers, only twenty-five cents—about one cent a copy. Where can you invest twenty-five cents that will pay you better? Get your neighbors to become members of the big FARM AND FIRESIDE family.

## "DOLLAR WHEAT"

### What It Means to the Farmer

TRUSTS and monopolies are usually considered to be unfair, because they tend to make the rich richer and the poor poorer. Nevertheless, in some cases the producers are directly benefited. For instance, when a big "corner" raises the market price of grain and produce to a fabulous sum, the farmer benefits, if he does not part with his wheat too early, and a dollar a bushel would mean, on an average, that over \$750,000,000 would go annually into the pockets of the farmers of the United States. The operators later buy up all the available grain, and store it in big elevators, awaiting the proper



moment to unload it on the market at the best price.

There is a big "elevator" in the human body, which adjusts the supply and demand of food materials. All the blood that comes from the stomach and bowels during the digestion of a meal passes first through the liver, and its contained food-matter is extracted. The starches, sugars and fats are stored up by the liver, and issued to the system as needed by the tissues, and certain poisonous matters of the food are taken out and gotten rid of by the bile. If the liver becomes torpid or diseased, all these functions are interfered with. The food is not properly modified to supply the tissues, and the poisonous matters are thrown back into the blood, causing headaches, bowel irregularities and often severe illness, as jaundice, wherein these liver poisons are so abundant as to give a yellow color to the skin. A "bilious spell" is simply the result of an effort made by the liver to catch up when overworked and exhausted.

In the same way that the earth yields food for man, so does it provide remedies for human ills. Thousands of households throughout the farming districts of the United States know the value of Dr. Pierce's Golden Medical Discovery. It is nature's most valuable and health-giving agent—made without the use of alcohol. It contains roots, herbs and barks, and is the concentration of nature's vitality as found in the fields and woods. This remedy has a history that speaks well for it, because it was given to the public by Dr. R. V. Pierce, founder of the Invalids' Hotel and Surgical Institute at Buffalo, N. Y., nearly forty years ago, and has since been sold by dealers in medicines in ever-increasing quantities. Some medicines, tonics or compounds enjoy a large sale for a few years, then disappear from the public attention; but Dr. Pierce's Golden Medical Discovery has proved such a reliable blood remedy, tonic and liver regulator that it often enjoys the confidence of several generations in a family, and its increased sales year by year, coming from the recommendations of those who have tried it, prove its lasting merit, so that every bottle bears the stamp of public approval. Every other well-known liver regulator, blood-maker and tonic for the stomach that we know of contains alcohol, but Dr. Pierce guarantees that no alcohol is contained in his "Medical Discovery."

This remedy works in the natural way by throwing out the poisons from the blood and correcting the irregularities of the stomach by promoting digestion and assimilation. The blood is cleansed and fed on proper nourishment, the nerves get rich red blood, and in consequence nervous troubles disappear, for they are often due to improper nourishment. Neuralgia is the cry of the starved nerves for food. Feed the nerves on pure, rich blood, and nervous symptoms will disappear. The result of indigestion and dyspepsia is that the person's blood becomes thin and watery because it is not fed on that nourishment which it should take from the food, and the person becomes nervous and sleepless. All such persons we advise to

take the "Golden Medical Discovery" three times a day.

\$3,000 forfeit will be paid by the World's Dispensary Medical Association, Proprietors, Buffalo, N. Y., if they cannot show the original signature of the individuals volunteering the testimonials below, and also of the writers of every testimonial among the thousands which they are constantly publishing, thus proving their genuineness.

"I was suffering from loss of appetite, pains in stomach, bad cough and headaches, and was getting very thin and weak," writes Beatrice M. Elliott, of Park Hill, Ontario. "I was advised to try Dr. Pierce's Golden Medical Discovery and 'Pleasant Pellets.' After following this advice I am happy to say my health is greatly improved."

D. W. Hillborn, of Haysville, Ontario, writes: "My little girl has been subject to bilious spells, and after trying other remedies without effect, and doctoring, we gave her Dr. Pierce's Golden Medical Discovery. She has not had an attack since taking the first bottle, and besides, her system is better fortified against colds. When she takes a cold, she has not the deep, croupy cough that accompanied it at former times. Although having always been thin, she is gaining in flesh now, and we consider her improvement due to the 'Golden Medical Discovery.'"

"For ten years I suffered with female trouble, also catarrh of the stomach, liver and kidney troubles, and catarrh of the bladder," writes Mrs. Lottie M. Douglas, of Glenmore, Oneida County, N. Y. "I would have very hard headaches and blind spells; stomach and bowels used to bloat a great deal, and I was troubled with bearing-down pains all the time. Tongue cannot tell how much I suffered from nervousness. I used to think I should lose my mind, my head would feel so bad. My heart was so bad that the least excitement, and even to turn over in bed, would cause palpitation. Had female weakness so bad for three years that I was in bed most of the time—in fact, could scarcely be on my feet at all. I tried seven different doctors, but received no lasting benefit. I was entirely discouraged when I wrote to Dr. Pierce, stating my case. He advised me to try his remedies, and I did so. The first bottle I took helped me, and the bloat began to get out of my stomach. I continued the medicine until I had taken nine bottles of Dr. Pierce's Favorite Prescription and nine bottles of his 'Golden Medical Discovery' and six vials of his 'Pleasant Pellets.' I also followed special directions for home treatment (which he advised), and the result was wonderful. My bad feelings left me, and I can work with comfort now. I give all the praise to Dr. Pierce and his remedies, for I believe they saved my life. Our family physician said I could not get well."

DO YOU KNOW YOUR OWN SYSTEM? A complete medical book and physiology of the body is Dr. Pierce's Common Sense Medical Adviser, which can be had for the price of postage, 31 one-cent stamps for the cloth-bound book, or 21 stamps for the paper-bound volume. Address Dr. R. V. Pierce, Buffalo, N. Y.

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every one of your customers is a possible customer for our magazine each month. It is easier to sell them a copy for 10 cents once a month than to get a year's subscription, and you make more money this way. We have a new scheme for working up a big list of monthly customers that can be gotten quickly, and will mean an assured monthly income. If you are a hustler, write us at once, and we will do the rest.

CIRCULATION DEPT.

WOMAN'S HOME COMPANION  
SPRINGFIELD, OHIO



## Tax Question

F. W. S., North Dakota. You will need to consult the county treasurer to ascertain whether your property is subject to taxation. I think, however, that it is.

## Will Written by Legatee

W. D. B., Virginia, wishes to know: "If a married man has no children, and his wife writes his will, she also being his heir, and he signs the will in the presence of three select witnesses, will it be a legal will when recorded?"

If the wife merely put down in writing the wishes of the husband, and did not influence him in any way, and the will is properly signed, it will be valid.

## Inheritance

M. H. S., Connecticut, asks: "According to the laws of Connecticut, how would an estate have to be divided, the deceased leaving no children, her brother and sister being dead, but leaving children?"

I should think it would be distributed to the children of the brother and sister, the children of each brother and sister sharing equally in the share the brother or sister would have received had he or she lived. In some states, however, in such cases the nephews and nieces would all share equally in the estate of their deceased aunt. Better consult a local attorney.

## Recovery of Money for Labor Performed

H. A. B., Alabama, inquires: "A. sells B. some land, and gives bond for title. B. gives A. his note, payable by a certain time. B. starts to build a house on said land, gets the building up, and covers it. B. sees that he cannot pay A. B. goes to C., and sells the land to him with the understanding that C. was to pay him for the work done on said land and house. Can B. by law compel C. to pay him? There was no written agreement between B. and C., but B. has a letter that C. wrote him, promising to pay, but didn't do it. Can B. sell or hold the house on said land?"

If C. agreed to pay for the labor, even though it was not in writing, it could be recovered. I doubt very much whether B. can sell or hold the house.

## Child's Interest in Parent's Estate

C. A. N., Illinois, inquires: "A man living in Pennsylvania was twice married. Three children by the first marriage and two by the second are living, all grown up. The man had a farm willed him by his father. The youngest of the children by the first marriage was raised by relatives, but not legally adopted. The man disposed of his real estate and most of his personal property to a son by the second marriage, a written agreement being entered into that said son should pay the others a stipulated amount, except the youngest child by the first marriage, who was not even mentioned in the agreement. The buyer was to take care of his parents when helpless of old age. Can the child that was cast out of her rightful share in her father's property recover anything now? If she or her heirs survive her father, could they get her share of real estate or compel the buyer to pay the rightful amount in money?"

If the will gave the property without limitations, without restricting the right of the father to dispose of the property, the youngest child could get nothing. Some people seem to think that a parent cannot do with his property as he chooses, and that he must leave some of it to his child. This is a great mistake. A child has no interest in his parent's property until the parent dies, and then only in the property that the parent has not disposed of either by will, contract or deed.

## Burns

Ten grains of menthol dissolved in one ounce of distillate of witch-hazel is said to relieve the pain of a burn in one minute. It may be applied on gauze dressing.

## The Propagation of Typhoid Fever by Butter

Authors differ as to the time the typhoid bacillus will live in butter. Heim puts the period at three to four weeks, Lasear at six days, Fränkel and Kister at twenty-four hours. Carl Bruck, of Leipzig, Germany, has given the results of some experiments of his own. He added three loopfuls of a twenty-four-hour-old agar culture of the typhoid bacillus to five hundred centimeters of milk, and was able to find the bacilli abundantly in the cream, the butter and the whey, and still alive at the end of twenty-seven days. He got similar results when the milk was not contaminated, but merely the water used in washing out the butter-making machines, and also when the utensils of the creamery were scrubbed out with linen cloths soiled by the dejections of a typhoid-fever case. He

## The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

## Dropping Letter of Name

E. M. C. says: "Please advise me through your paper what a person ought to do when his father willed him a piece of land and left out one of the initials of his name."

It will make no particular difference. In making conveyance of the land, you had better sign the name as in the will. You can drop the letter if you desire.

## Gift of Money

A. D. W., Iowa, asks: "My mother received a sum of money from her brother by will. After receiving the same she gave it equally to her sons before witnesses, with the understanding that the sons should let or lend it to their father for a year or two. The sons did not ask for nor receive any notes or papers of any kind. The mother died some time afterward, leaving no will. To whom does the money belong?"

The money belongs to the sons, for the reason that the mother gave it to them. The mere fact that the father did not give any note would not affect the matter, provided the sons could prove the money was given to them. In such a case the father merely holds it in trust for the sons, and I have no doubt a court of equity will compel him to account to them for the money.

## Rights of Husband and Wife

Mrs. S., California, inquires: "Please inform me as to the law of the state of California regarding holding real estate in partnership between husband and wife. I hold a piece of property left me by my father. Suppose I should sell it, and buy a farm, could I deed the half of that farm to my husband as a gift, and keep the other half in my name? Would that be legal, or would my husband have the right to take my share of it, since I bought it? At the death of either of us, who would come in for a share of the deceased one's half interest, as there are no children?"

You could deed one half to your husband. A better way would be to have the farm deeded to both of you. At the death of one, the other would get one half of the deceased one's interest. If it is desired that the surviving one should get all, then a will should be made.

## Statute of Limitations

J. J., Kansas, says: "The line fence between my neighbor and myself has been built over fifteen years, part belonging to him and part to me. The line has never been surveyed, and never divided, and no corner-stones placed. Last spring I wanted to move the fence on the line, and we agreed to call the surveyor. He came out. My neighbor was one of the chainmen, I was the other, and no appeal was made. We found the old fence ten rods in on my land in places. The fence-viewers have been out and viewed the new line, and they have given him orders to move his fence off of my land and keep up half of the fence on the new line. He says he won't do that. He is trying to claim the land after having it in his possession for fifteen years."

I very much doubt whether he could keep the land, as the fence was put where it was by mistake. If he is the right kind of man, he will not want to keep it. If he does, consult a lawyer near your home.

## Eggs Laid on Another's Premises

M. S., Ohio, inquires: "If B.'s hens lay eggs in A.'s barn, has B. a right to go in A.'s barn and get them without permission from A.? A. has no chickens. Who has a right to the eggs?"

The eggs would belong to the owner of the hen, but he would have no legal right to go on the premises of another to get the eggs without paying the owner of the premises the damages incurred by so doing, or else by getting the owner's permission.

## Deed to Wife and Heirs

J. O. S. inquires: "My father bought a farm, paid one third down, and then died. The farm was deeded to my mother and his heirs. There were four children, and two of them were single. The mother and the single children paid for the farm. Has mother the right to sell the place? Have the married children any right to the farm?"

If the farm was deeded to the wife and her heirs, the wife might do with it as she chose. If, however, it was deeded to the wife and the heirs of her husband, then the single children and married children would share alike.

## A Good Deed

T. F. B., Ohio, inquires: "About nine years ago A. made a will by which he willed to B., his granddaughter, eighty acres of land, with contract that B. and her husband were to take care of A. and C., his wife, during their lifetime. Not being satisfied with the will shortly after making it, A. made a deed for the same eighty acres of land, consideration eleven hundred dollars and life estate. In addition, a contract was made that B. and her husband were to support them during their lifetime, which they did. A. and C. died three years ago. C. did not sign the deed. A. and C. have other heirs living, one a son. B. has both will and deed. The will was not probated. The deed was properly witnessed and recorded. Can B. make a good title for this eighty acres of land?"

Yes. C. had only a dower interest in the land, which would cease on her death.

## Deeding Away Property

C. O. F., Kansas, inquires: "A. died in Missouri April 7, 1903, leaving three sons and one daughter. Four years before his death, and one year before his wife's death, he deeded the land—six hundred acres, worth about eighteen thousand dollars—to the two youngest sons, leaving nothing to the daughter and the oldest son. This deed was made without the knowledge of his wife. A. had never given his daughter anything. Can she get her share of the estate by law? A. had told different parties that he wanted his daughter to have her share in money, and I think he had made arrangements with the sons to pay her share in money, but they will give her nothing."

I rather doubt whether the daughter could recover anything unless she could show that the sons had promised to give her something; then, whatever they had agreed to pay could be collected. If the wife had asserted her rights during her lifetime she might have done something. A parent may give his property to any person or child he chooses. A child has no absolute right to his parents' property.

## Child's Share of Estate

L. D., Arkansas, asks: "Where both father and mother are dead and the children under age, can one of the children, she being married, collect her part of the estate from the guardian, it being money and being in his possession?"

No, not unless she is of age.

## Receipt for Lost Note

J. H. F., Ohio, inquires: "A. borrowed a certain sum of money of B., giving his note for same. When it came due, A. paid the full amount with interest, but B. failed to give up the note. He first said he had destroyed the note, and afterward said he had lost it. Could a receipt be so worded as to release A. if B. should try to collect the amount the second time?"

The receipt should describe the note, and say that it has been paid in full. That would be sufficient.

## Deed to Wife

J. S., Kentucky, inquires: "A man in Kentucky died, having deeded his property to his wife, and at her death to go to his son. There being other heirs, can the son get full possession of this land at the wife's death? She has never signed her name to any papers. Can he pay off debts against said property after his father's death to make deed good? His father had refused to pay the debts."

If the man deeded the property to his wife, and specified in the deed that after the wife's death it was to be the son's, this would control. If there is no limitation in the deed, the wife can convey to whom she chooses. If she makes no conveyance to any one, it will go to her heirs. Unless the son is protected by the deed that the father made, or is the only child, or the wife conveys the property to him, it would do him no good to pay off the debts.

## Limitation of Liability for Stock Killed

M. R. M., Kansas, asks: "Suppose I have a horse valued at five hundred dollars, and appraised to be worth that amount by three disinterested parties, and I shipped him over a railroad, and also signed a contract like the one inclosed, which fixes the amount that I can recover in case of wreck, etc., at one hundred dollars. Now, if this horse was killed in a wreck or by some neglect of the company, could I recover more damages than one hundred dollars?"

It seems from the inclosed contract that it was agreed that if the horse was shipped at a certain rate, not more than one hundred dollars could be collected. If more, then a different shipping-rate would be applied. It seems to me such a contract was legal and not against public policy, and that one hundred dollars would be all that could be collected. There may be some statute or decision of your state to the contrary, and you had better consult a local attorney.

[Since the above was prepared my attention has been called to a decision of the Supreme Court of Iowa, in which it was held that notwithstanding such contract, the full value of the horse could be recovered. In this Iowa case, however, it seems that the railroad company knew that the horse was of a greater value than one hundred dollars at the time it took possession of him.]

## Help Some

Cannot you arrange to get some of your neighbors to subscribe for FARM AND FIRESIDE at only twenty-five cents a year? FARM AND FIRESIDE is trying hard to secure many thousands of new subscriptions, and it needs the hearty cooperation of all its readers. Just one or two subscriptions in addition to your own will help a great deal. We allow a commission on clubs of two or more.

## The Family Physician

By ROBERT B. HOUSE, M.D.

thinks that suspicion should fall upon the milk or butter in cases of typhoid where a water origin can be apparently excluded.

## Too Much Water

At a meeting of the Chicago Eclectic Medical and Surgical Society a certain professor, John Dill Robertson, is reported to have inveighed against the prevalent habit of bathing. Bathing was declared by the speaker to be a dirty habit, inasmuch as it made a sewer of the skin; blood is attracted to the skin, and there leaves products that should have been discharged from the body by other and more natural outlets. An unwashed body with a daily change of underwear was hygienic perfection.

While not so radical in his views as this eclectic professor, we believe that

the late Lawson Tait was very strongly of the opinion that most people bathed more than was good for them. A German savant not so long ago declared that the invention of soap was one of the greatest curses that ever befell man. Mother Eddy tells us authoritatively in "Science and Health, with Key to the Scriptures," price according to the binding, that "constant bathing and rubbing to alter the secretions, or to remove unhealthy exhalations from the cuticle, receive a useful rebuke from Jesus' precept, 'Take no thought . . . for the body;' and again, 'The daily ablutions of an infant are no more natural or necessary than would be the process of taking a fish out of the water every day and covering it with dirt, in order to make it thrive more vigorously thereafter in its native element.'"

## The Right of the State to Pass Laws Requiring the Vaccination of Children

A decision in regard to the right of the state to pass laws requiring the vaccination of children as a condition of their attending the public schools has been made recently in Pennsylvania.

The father of a child who was denied admission to the public school on account of not being vaccinated in accordance with the rules of the board of education and an act of the legislature, brought a mandamus suit in the city of Philadelphia. The court of common pleas maintained the right of the board of education to demand such vaccination, and on appeal the supreme court sustained the ruling of the lower court in the following terms:

"We think that the court below did not err in the ruling referred to. In the case, Duffield vs. Williamsport School District, we held that school-directors in the exercise of a sound discretion may exclude from the public schools pupils who have not been vaccinated." It will be observed, however, that in this case an act of the legislature gave power to the board of education to make this ruling.



## Wit and Humor

### The New Version

A soldier of the Russians  
Lay jappanned at Tschrizvkskiitch,  
There was lack of woman's nursing  
And other comforts which  
Might add to his last moments  
And smooth the final way;  
But a comrade stood beside him  
To hear what he might say.  
The jappanned Russian faltered  
As he took that comrade's hand,  
And he said, "I never more shall see  
My own, my native land;  
Take a message and a token  
To some distant friends of mine.  
For I was born at Smnlxrskgqrski,  
Fair Smnlxrskgqrski on the Irkztr-  
vzklmnov."  
—W. J. L., in New York Sun.

### Take Your Choice

A WRITER in "Lippincott's" tells of a young teacher who had taken special pains to implant a knowledge of United States history, who could but feel that much good seed sown had fallen on stony ground, when at the final examination the question, "What character do you like best, and why?" brought forth the following astonishing replies:

"Andrew Jackson, because he whipped the British with an old hickory."

"Grant, who was elected President twice and around the world once."

"I like Monroe for doctrin' the people and Jackson standing on a stone wall, and fell dead."

"Lincoln, who was shot and killed standing in a booth, and died saying, 'Jefferson survives, I am contented.'"

"De Soto, who waded in the Mississippi up to his elbows and there found his grave."

"Old General Putnam, who left his ox and his ass in the field and went and beat the British."

"The redoubtful John Paul Jones, because he said, 'We'll beat them British or bust, and then did it.'"

### A Gallant Butterman

When the Queen of England, daughter of the King of Denmark, was the Prin-

head. "No, your royal highness," he answered, gallantly, "Denmark sends us the best princesses, but Devonshire sends us the best butter."—New York Tribune.

### The Doctors Agreed

"They have called two doctors in for consultation."

"And do the doctors agree?"

"I believe they have agreed upon the price."—Philadelphia Ledger.



CHANGEABLE

"Now, what color would you call Miss De Style's hair?"  
"Couldn't say. I haven't seen her for nearly a week."

### Busy

"I can't understand your dislike for Mrs. Nexdore," said Mr. Goodart; "she seems a nice, quiet, home-loving woman."

"Think so?" replied his wife.

"Yes. She certainly appears to be a busy little body."



Mrs. Cutting R. E. Marks—"I hope we'll be settled in our new flat the next time you call."

Mr. Borem Sew—"When are you going to move?"

Mrs. Cutting R. E. Marks—"Not for several months yet."

cess of Wales, she attended a food-show one afternoon.

At this food-show there was a display of butter that pleased the Princess of Wales greatly. She praised the butter, and to its exhibitor she said, "Denmark sends us the best butter, doesn't it?"

The dealer smiled, and shook his

"You've got the 'little' in the wrong place."—Philadelphia Press.

### Very Easy

It will be comparatively easy to get one of our free trips to the World's Fair. See page 23. We have a plan that will help you.

# Mysterious Power Over Disease

## Wonderful and Miraculous Cures Performed by a Mighty Healer.

### Most Marvelous Medical Discovery of the Century.

## At Last There Has Been Discovered the Secret of Long Life and Perfect Health.

## It is Free to Rich and Poor Alike. Every Sick, Afflicted or Suffering Man or Woman is Invited to Try This Remedy Free of Charge.

(From New York Journal.)

FORT WAYNE, IND. (Special Correspondent). In response to numerous requests, your correspondent called on the now famous Dr. James W. Kidd, to learn, if possible, the secret of the mysterious power by which he was effecting so many wonderful cures. Dr. Kidd was found at his office busily engaged in answering the hundreds of letters of inquiry which he is daily receiving from all over the world regarding his remarkable discovery.

"It is hardly necessary to say that I am busy," said the doctor. "In those files are thirty-five thousand letters that we received and answered last month, but I am always willing to explain, as far as possible, my discovery, especially to newspaper men, because I know that they will publish the information, and I want the whole world to know that there has at last been discovered a remedy which will cure every ailment."

"What will cure every case?"  
"It will cure every disease that I have been called upon to treat in my experience in thousands of cases, and has positively cured thousands of afflicted people who thought that they were beyond all earthly help."

"What do you call your discovery?"  
"The Elixir of Life." Dr. Kidd here showed the correspondent a number of small egg-shaped capsules containing various colored liquids in which floated small tablets, and said: "Doctors have known and used nearly all the remedies which constitute my discovery for years, but the proportions and the method of compounding are my secret."

Do the doctors accept or use your discovery? was next asked.

"Not as a rule, because I do not care to explain or give my secret to them. It is the result of a lifetime of study and experiment, and naturally I am jealous of the honor which it brings me."

Do your patients seem to appreciate what you do for them?

"Yes, indeed. In this set of letter files are thousands of letters from grateful cured patients, and I am receiving more every day. They are the greatest source of pleasure and satisfaction to me, and the only pay that I ask for the years of study that this discovery cost me. Here are a few which are particularly interesting to me, because they are patients whom I cured two years ago, when I first made my discovery, and before I was as sure of the results as I am now. They are all enjoying perfect

health now. You may publish as many of them as you like, as I have their permission."

Your correspondent copied the following extracts word for word from a few. The following from Miss Sarah Penington, Milton, Iowa, tells a thrilling story of her cure: "It does not seem possible that a person paralyzed as I was could be cured in 18 days. When you got the statement of my case I was perfectly helpless, had to have a friend write to you in my name. Now I feel that I am cured. I will always praise and thank Dr. Kidd for what he has done for me. You cured me when others had given me up to the grave."

A. C. Blair, a prominent attorney of the firm of Blair & Green, Charleston, W. Va., writes as follows: "I received your treatment for nervousness, indigestion, stomach, kidney and bladder trouble, twenty days ago. It is truly 'The Elixir of Life.' I am agreeably surprised at the wonderful result. I have suffered for more than five years, and was getting worse all the time. I have improved daily since beginning your treatment. I now feel ten years younger. Instead of having to pull myself up the court-house steps by the railing, I now run up as I did ten years ago." Ten days later Mr. Blair reports as follows: "I am restored to perfect health, sleep well, eat hearty, digestion good, kidneys and back cured, nerves in fine shape."

Your correspondent was shown hundreds of other testimonials telling of miraculous cures of apparently every disease with which man or woman was ever afflicted, and was firmly convinced that Dr. Kidd is only too modest in his claims for his marvelous discovery.

Can your "Elixir of Life" be used by patients at home?

"Yes, with my instructions, and with equally as good results."

Is it true that you are giving away treatments to all applicants?

"Yes, and I expect to continue until its virtue is known all over the world. You can tell your readers that I will send every sick or afflicted person a course of treatment prepared especially for their case by mail postage paid and absolutely free. To be sure of personal attention ask them to describe their case, and address my private office as follows: Dr. James W. Kidd, 122 Bates Block, Fort Wayne, Ind."

As the doctor asks for no money, it would seem that every reader afflicted in any way, no matter what the disease, should take advantage of this liberal offer.

### WE SHIP ON APPROVAL

without a cent deposit and allow 10 DAYS FREE TRIAL on every bicycle. Any wheel not satisfactory returned at our expense.

Highest Grade 1904 Models \$8.75 to \$17  
Coaster Brakes. Hedgehorn puncture proof tires and best equipment.  
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All makes & Models good as new \$3 to \$8

Great Factory Clearing Sale at half factory cost.

EARN A BICYCLE taking orders from sample wheel furnished by us. Our agents make large profits. Write at once for catalogues and our special offer. AUTOMOBILES, TIRES, Sewing Machines, Sundries, etc., half usual prices.

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### 25c. Superfluous Hair Removed

I guarantee that a few drops of my liquid will remove hair instantaneously, effectively and without the slightest harm, pain, burn or blister. Sent upon receipt of price with full instructions.

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Write for names of hundreds of delighted customers. Make \$50 to \$500 weekly. Do business at home or traveling, all or spare time, selling Gray outfits and doing genuine gold, silver, nickels and metal plating on Watches, Jewelry, Tableware, Bicycles, all metal goods. Heavy plate. No experience, quickly learned. Enormous demand. No toys or humbug. Outfits all sizes. Everything guaranteed. Let us start you. We teach you FREE. Write today. H. GRAY & CO., CINCINNATI, O.

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**BED-WETTING** CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.





## Everybody's Corner

Trust your neighbor.

It is better to be one-sided than two-faced.

Be sociable, kind and accommodating. It pays.

Watching your neighbor's garden will not keep the weeds out of your own.

Don't be selfish. Work for others and the good of your community as well as for yourself.

By keeping your horses shut up in a dark stable you may permanently injure their eyesight.

Be a constant reader of FARM AND FIRESIDE, and it will guide you out of many a difficulty.

Saturday should generally be a cleaning-up day on the farm. Have plenty of system and order. It pays.

Finely sifted coal-ashes is an excellent thing to polish all kinds of metals, tins, etc. Use a damp rag. Try it.

The worst of all enemies to the garden are weeds, which should be destroyed by all means. Don't let them grow.

Do you want a free trip to the great St. Louis World's Fair, all expenses paid—every necessary cent? If so, look on page 23.

Look at the address label on your FARM AND FIRESIDE, and keep your subscription paid up. That's the way to do business.

When the horses which have been idle all winter are put to work again in the spring, be careful with their collars and shoulders.

Keep the mud washed off the carriages, wagons, machinery, etc. Mud left on vehicles day after day will soon take all the paint off.

A single well-weighed phrase is worth a thousand superfluous ideas, and a single well-developed idea is worth a thousand redundant phrases.

Train the children to use their best manners at home, and they will never be ill-mannered in public. Reprove a child in private, not in public.

Did you have plenty of vegetables in the garden last year? If not, you had better see that your garden this year produces plenty for your needs and some to spare.

Some day when you have a little time write a letter to FARM AND FIRESIDE, and tell what you think of the paper. For or against, you will not offend. Reproof is the sign of a friend.

Twenty-five cents invested in a year's subscription to FARM AND FIRESIDE may yield hundreds of dollars in return. Thousands of readers say that it is the best paper that comes to their home.

The weather bureau collects its information by telegraph, and for a short time twice a day the whole telegraph system of this country is at its service to the exclusion of all other business whatsoever.

FARM AND FIRESIDE, twenty-four numbers for twenty-five cents, the yearly subscription price, is the biggest bargain offered by any concern in the United States. There is no better paper published.

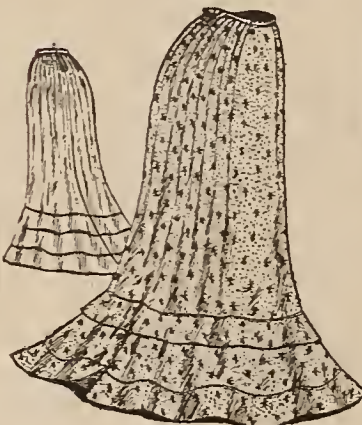
Either "Gleason's Horse Book" or "The Complete Poultry Book," and FARM AND FIRESIDE one year, for only forty cents. These books are standard authorities on their respective subjects, and widely known.

Keep the wagons, buggies, drills, rakes and machinery well oiled. Dry axles are hard on the teams, and double their labor. The horse is the noblest of all animals. Treat him kindly, and he will last longer and do better work.

A new and very interesting war-story will, in all probability, begin in the June 15th FARM AND FIRESIDE. It is called "Two Girls Against Eighteen Thousand Men." If you miss this, you will miss one of the best war-stories ever written.



No. 246.—SHIRT-WAIST WITH WIDE BOX-PLAIT. 10 cents. Sizes, 32, 34, 36 and 38 inches bust.



No. 2066.—CIRCULAR SKIRT. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.



No. 2016.—SUNBONNETS. 10 cents. Sizes, small, medium and large.



No. 2061.—MILITARY SHIRT-WAIST. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.



No. 4716.—GIRLS' SACQUE NIGHTGOWN. 10 cents. Sizes, 8, 10, 12, 14 and 16 years.

ASK FOR OUR NEW SPRING AND SUMMER PATTERN CATALOGUE. WE SEND IT FREE

# New Spring Styles Garments to be Cut and Made at Home Perfect Patterns for 10 Cents

Similar patterns retail in fashion bazaars and stores at 20 cents each, but in order to introduce FARM AND FIRESIDE into thousands of new homes, and to make it more valuable than ever to our regular patrons, we offer our line of stylish patterns to the lady readers of our paper for the low price of only 10 Cents Each.

Full descriptions and directions—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, with a picture of the garment to go by. These patterns are complete in every particular, there being a separate pattern for every single piece

of the dress. All orders filled promptly. For ladies' waists, give BUST measure in inches. For SKIRT patterns, give WAIST measure in inches. For misses, boys, girls or children, give both BREAST measure in inches and age in years. Order patterns by their numbers.

Satisfaction guaranteed or money refunded. To get BUST and BREAST measure, put the tape-measure ALL of the way around the body, over the dress, close under the arms.

Patterns 10 cents each, or three for 25 cents. Postage one cent EXTRA on skirt, tea-gown and other heavy patterns.

Send for our Pattern Catalogue. We design and cut our own patterns.

**FREE** We will give any THREE of these patterns for sending TWO yearly subscriptions to Farm and Fireside at the regular price of 25 cents each.

We will send Farm and Fireside One Year, new or renewal, and any ONE pattern for **Only 30 Cents**



No. 245.—SHIRT-WAIST WITH CHEMISETTE. 10 cents. Sizes, 36, 38 and 40 inches bust.



No. 223.—LADIES' CHEMISE. 10 cents. Sizes, 34, 36 and 38 inches bust.



No. 41.—MILLER SHIRT-WAIST. 10 cents. Sizes, 14 and 16 years and 34 inches bust.



No. 4712.—MISSSES' FIVE-GORED SKIRT. 11 cents. Sizes, 12, 14 and 16 years.



No. 2054.—MISSSES' SEVEN-GORED KILT-PLAIED SKIRT. 11 cents. Sizes, 12, 14 and 16 years.



No. 200.—GIRDLE BELT. 10 cents. Sizes, 22, 24 and 26 inches waist.



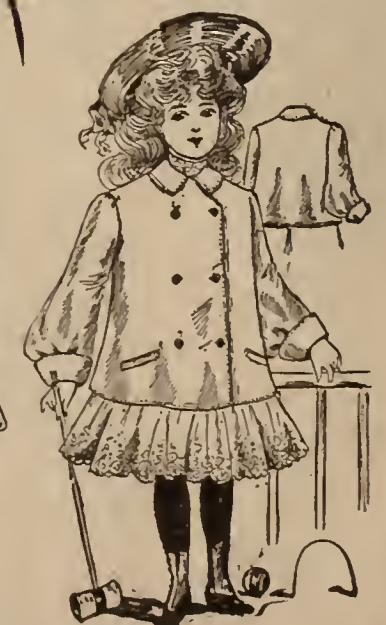
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No. 2056.—NINE-GORED WALKING-SKIRT WITH PANEL EFFECT. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.



No. 4717.—CHILD'S COAT. 10 cents. Sizes, 2, 4, 6 and 8 years.

Address FARM AND FIRESIDE, Springfield, Ohio



# Grand Free Trips



## To the Great St. Louis World's Fair

Including every necessary cent from the time you leave home until you return again. If you don't want to take the trip, you may have the equivalent in cash.

**Five  
Free  
Trips**

*To each one of the five persons who send the greatest number of subscriptions to Farm and Fireside between now and September 15, 1904, Farm and Fireside will give a free ten days' trip to the great St. Louis World's Fair during the month of October, paying all expenses, including railroad fare, hotel bills, admissions, and all necessary expenditures from the time they leave home until they return.*

**Five  
Free  
Trips**

A big cash commission will be paid on every subscription you take, in addition to the above free trips to the World's Fair.

### Write to-day for full particulars

and while you are waiting to hear from us, start in to get up your club, taking each subscription to FARM AND FIRESIDE at twenty-five cents a year. You will be well satisfied with the commission we will allow you. Don't wait, or some one will get ahead of you. We will send you special subscription blanks and full instructions—everything you need to win a prize trip.

### It will not take very many subscriptions to win the prizes

You will be surprised when the time arrives to see how easily these magnificent trips to the great St. Louis World's Fair were won, and what a very small club, comparatively, it required to secure these prizes. Now, don't think some one has a better chance than you—you have as good a chance as anybody. Don't stop to study over it, but get right out and hustle a little, and you may wake up to find yourself one of the lucky ones. Be quick.

### CONDITIONS

1. Any person can enter this contest.
2. All subscriptions to FARM AND FIRESIDE must be taken at twenty-five cents a year.
3. A liberal cash commission will be paid for each subscription sent in by contestants; this is in addition to the free trips. Get your friends to help you.
4. You must mark each list you send in "World's Fair Contest," so that no mistakes are made in crediting the same to your account.
5. The contest is limited to the United States only.
6. Each successful contestant will have ten days at the fair during October, all necessary expenses paid from the time they leave home until they return.
7. Contest closes September 15, 1904.
8. In case of a tie, the prize will be one hundred dollars and equally divided.
9. If you don't want to take the trip, you may have the equivalent in cash not to exceed one hundred dollars.
10. Publishers, subscription agencies and wholesale dealers, etc., not permitted to enter this contest.

*No one connected with our establishment, either directly or indirectly, and no one living in Springfield or Clark County, Ohio, will be permitted to enter the contest, and the contest will be conducted in the fairest manner possible.*

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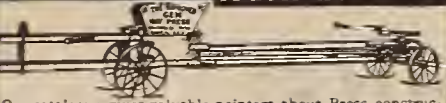
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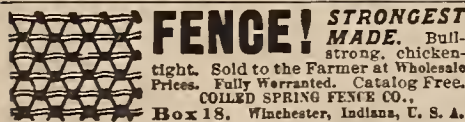
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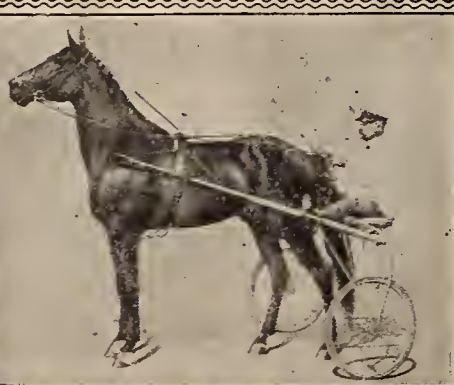
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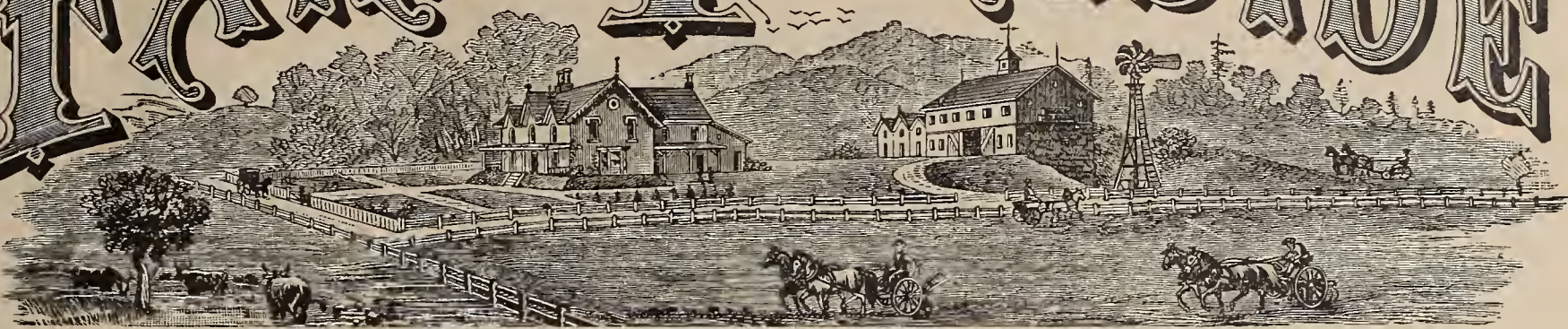
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# FARM & FIRESIDE



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JUNE 1, 1904

TERMS (25 CENTS A YEAR  
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## The Bagobos

By GUY E. MITCHELL

ONE of the most interesting people of the many tribes inhabiting the Philippine Islands is the tribe called Bagobos, living in the country surrounding the volcano Apo, in the province of Davao, on the southwest coast of Mindanao. These people claim to be the aborigines of the island, and are certainly very distinct from the Moros, who have overrun Mindanao and the surrounding islands. The Bagobos are lighter in color, and when pure-blooded have the characteristics of the Polynesians rather than those of the Malay races. This race, or tribe, of people has successfully withstood the attacks of the warlike Moros, and in many a pitched battle have proved their supremacy. Unlike the Moros, they are neither fishermen nor metal-workers, but are agriculturists pure and simple. Although at war many times with the Spaniards and the Visayan Filipinos, whose migration into Mindanao followed the Spanish occupation, yet withal they are peaceably inclined. These statements are obtained from Mr. Alonzo H. Stewart, the assistant sergeant-at-arms of the United States Senate, who has recently returned from a seven months' tour of the Philippines and the Far East.

The adaptability of these Bagobos to new conditions was very forcibly shown to Mr. Stewart during his visit to Davao, where he was entertained by Chief

reliable, intelligent workmen. The white men built a little house of sawed lumber, roofed it with corrugated galvanized sheet iron, and floored it with tongue-and-groove stuff. The Americans cultivated their soil with large American double-horse plows, to which were hitched a yoke of native carabao, to the horror and astonishment of the Visayans. Their methods of cultivation demonstrated two facts of great importance: First, that the so-called Cogan-grass, which is supposed to destroy the fields where it once occupies the soil, is very readily eradicated by ordinary American plowing and cultivation, and second, that the native carabao, or water-buffalo, which was supposed not to submit to double yoking to a plow, works as easily and tractably as oxen. The fields of these Americans were fenced with barbed wire, their hemp planted in rows, contrary to the general method in that part of the island, and the ground between planted with camote, the native sweet-potato. These camote-vines cover the ground very rapidly, and prevent the Cogan-grass and other vegetation from making objectionable headway, and thus do away with the necessity for constant cleaning and cutting to keep down the weed-growth, which destroys most of the native hemp-fields.

For a year or more Augtone and his Bagobos watched with keen interest the American departure from the general methods which had been followed by their fathers and their fathers' fathers, and in all that country he is the only native to have adopted American methods of cultivation. Neither the Moros nor the Visayans have copied them, notwithstanding the overwhelming proof of their superiority. Augtone has ordered American plows, galvanized-iron roofing, tongue-and-groove material, and has started in to copy American methods. His hemp-fields are replanted in rows, and all the Bagobos who have come in contact with the Americans there are following the new agriculture, while neither the Visayan Filipinos nor the Moros have changed their methods one iota.

Although these Bagobos are pagans, having no religion, many of them join the church for commercial and social reasons, and become what are known as "neuvo Christianos" (new Christians). Mr. Stewart's information, gathered from various sources, leads him to state that this race will do more to develop the agricultural resources of that portion of Mindanao than either the Visayans or the Moros. With the establishment of schools and civilized education there is no reason why this people will not form the basis of a prosperous agricultural community.

Mr. Stewart has on exhibition in the Smithsonian Institute a complete outfit, representing a family group of Bagobos, showing their manner of dress, living and industries. They make their own clothes from cloth which they manufacture from the fiber of the hemp ("Musa textilis"). They are slave-owners, although very kind to their slaves, treating them as part of the family. They are great warriors, defending their homes and fields with bravery, and in times past have always been ready to carry salutary punishment into the camps of their enemies. They were formerly heart-hunters. The man who had killed the greatest number of tribal enemies, mostly Moros, and had taken out their hearts, was considered the greatest man in the community. Notwithstanding their enmity against the Moros, they have always traded with them, securing fish and weapons, although they make some of their own weapons. The

Bagobos are very good hunters, are skilled in woodcraft, and in the use of bows and arrows, spears and blow-guns with poisoned darts. In all the fights between the Spaniards and the Moros during the Spanish conquest, the Bagobos remained neutral, and then fell upon the vanquished. They had an hereditary grudge against both, and fed it fat upon every good opportunity.



MARIA, QUEEN OF THE BAGOBOS

### Notes and Comment

One half of the entire crop of kale and spinach produced in the United States is grown in the vicinity of Norfolk, Va.

Dr. R. H. Speight, the well-known cotton expert, says, "There ought to be a cotton-seed-oil mill for every thousand bales of cotton."

The winter of 1903-4 was in reality the coldest on record since weather observations began to be systematically taken, which was in 1872.

The East Tennessee Experiment Station has found that the Hickory King is one of the best general-purpose corns grown on the light upland soils at that station.

Seven car-loads of bees were recently shipped from San Marcos, Cal., to Churchill County, in western Nevada. There are already about fifteen hundred colonies of bees in that county.

The cotton-growers in the South ought to feel rich, since the value of the crop of last year was nearly one hundred and sixty million dollars more than in 1902.

United States Department Bulletin No. 59 (page 28) says: "It is not advisable to bring alfalfa-seed from a southern to a more northern region, or from an irrigated to a non-irrigated soil."

Why not keep more sheep? They eat many noxious weeds, such as ragweed, ironweed, goldenrod, etc. As to mutton as a substitute for other meat, much more is now being used than formerly. No grain-growing farmer should fail to keep a few sheep.

While the reader may think that his experiments with the soil are of little moment, if he will report them they may be the key that will unlock some difficult problem relating to agriculture. Cooperation between the soil-worker and the station experimenter may be, and often is, extremely valuable.

### The Hot Weather

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A BAGOBO WARRIOR

Augtone, who lived with his Bagobos just outside the little village of Dalaou. After the American occupation, several Americans settled in this small Visayan village, opened a store, took up lands, and started the planting and cultivation of hemp and other crops. They were unable to obtain workmen either from the Moros or from the Visayans. Cultivating the friendship of Chief Augtone, they were soon able to secure



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## About Rural Affairs

By T. GREINER

**SPRAYING TO KILL WEEDS.**—If it is true that by spraying with copper-sulphate solution we can kill a number of our worst weed-pests, such as mustard, ragweed, and possibly chickweed, thistles and purslane, without injuring grain and some other crops, we have in this a weapon against weeds which must be of untold value. The experiment station at Cornell (Ithaca, N. Y.) has issued a bulletin on the subject, but more and general field-trials are needed. Just now I have a chance to try the copper-sulphate spray for the chickweed that is just coming up thickly in my strawberry-patch. The spray will hardly hurt the vines. Some of our garden vegetables, like onions, celery, etc., can stand spraying with solutions of considerable strength quite well.

**PRODUCING OUR OWN SUPPLIES.**—The city dweller who lives within easy reach of a fancy grocery-store, and has a well-filled purse, may be able at times to have full supplies of good or fairly good things in the line of green stuff, fruits and meats for his table. The soil-tiller, whether he owns hundreds of acres or only a fraction of one, can have the very best of such things, and if he has not, there is nobody to blame but himself. In fact, in order to be able to have many things that we want, and in such quality as we want them, there is no choice but to produce them one's self. Just at this time, for instance, I have use for all the fresh eggs for hatching that I can make my hens lay, and if I didn't want them myself for that purpose I could easily sell them at fifty cents a dozen or a setting. People who have seen my Langshans are always calling for eggs at this time of the year. This makes us a little short of fresh eggs for the kitchen, as we use only the ones not of perfect shape, or defective otherwise, for cooking purposes. Sometimes I would like to buy eggs for the house, but I find it almost impossible to get strictly A No. 1 eggs. I can't get them at the stores, and it is a good deal of trouble to pick them up among farmers, most of whom supply regular customers. Even if I can get them, I am not always absolutely sure that they are strictly fresh. The only way for us to be sure of our egg-supply, therefore, would be to raise them ourselves—in other words, increase our stock of layers, or else go rather lightly on

eggs during the hatching-period. Then when the time comes that we want a few chickens for the table, or a first-class capon later on for our Sunday dinner, etc., we can get what we want when we have it from our own raising in our own yards. We don't know whether we will get it, nor what we will get, when we have to depend on the store or on the farmers around us. It is not a question of profit. It is a question of supply. Provided it costs us as much to raise the eggs or the chicks or capons as we could buy them for, yet we have to raise them in order to have them when we want them. So it is with berries, tree-fruits and vegetables. We cannot possibly buy as fine fruit in the stores, or as fine vegetables, as we can gather fresh right in the patch. Grow your own lettuce and celery and strawberries in the perfection that you can and should grow them, and when you happen to be out, try to get them in the stores, and note the difference.

**SOME GOOD EVERGREENS.**—I do like to have some evergreens on the lawn, and perhaps as a wind-break or shelter-belt for the buildings. The ordinary form of the Norway spruce is probably the best and most reliable, as it is the cheapest of all evergreens suitable for such purposes. It is entirely hardy, of rapid growth, and of good and regular form. For single specimens on the lawn I know of nothing more striking and more beautiful among all the more commonly known evergreens than the Colorado blue spruce. As William Hunt, of Canada, says, it may lack the graceful form of the Norway, but in a good specimen the beauty of the steely blue foliage is hardly equaled by that of any other evergreen. It is a somewhat slow grower. In ordering this tree, be sure to order or select the blue variety. I know little about Alcock's spruce, a native of Japan, and highly spoken of. "The upper surface of the leaves is dark green, and the lower surface bluish silvery green, the contrast giving the tree a very attractive appearance." One of the most interesting specimens of evergreen on my premises is a Mexican pine, and I can hardly say too much in its favor. It is not often seen on Northern lawns.

**A SQUAB BULLETIN.**—To me Farmers' Bulletin No. 177, written by Wm. E. Rice, and published by the Department of Agriculture, is very interesting. I have always had a liking for pigeons, and especially for squabs as an article for the dinner-table. Whether I have kept pigeons with profit to myself, however, may well be doubted. At times they were a great nuisance on the farm and on the roofs of buildings, befouling the hay in the barn and the water in the cisterns, etc., and helping in the propagation of various kinds of vermin. The benefits from keeping pigeons I often had to share with the pot-hunter, the cat, owls and hawks, so finally I got over the notion of wishing to keep pigeons as most people keep them—free to go and come. On the other hand, I will not deny that there may be fair profits in keeping pigeons of the kind one ought to keep, if any (pure homers, for instance), and keeping them in the way they should be kept—namely, confined to a yard, and provided with the right kind of food. About the cost and profits, Mr. Rice says: "With wheat at eighty cents a bushel, sifted cracked corn at one dollar a hundredweight, Kafir-corn at ninety cents a bushel, millet at ninety cents, hemp at one dollar and thirty cents, and peas at one dollar and ten cents a bushel, the cost will be one seventh of a cent a day for each bird, or about fifty-two cents a year. Feeding at such cost, I have never failed to realize an annual net return of one dollar and fifty cents a pair, but I was never able to secure such returns when feeding steadily on a wheat-and-corn diet." All the details of proper feeding are given in the bulletin. If you are interested, write to Washington for a copy.

**USES FOR PHOSPHATE ROCK.**—Floats, as the raw ground phosphate rock found in South Carolina and Florida is often called, comes to the front again for new uses. The director of the Ohio Experiment Station, Professor Thorne, told me last winter that they consider it a good addition to stable manure in some cases. The fermenting manure will most likely act on the phosphoric acid in the floats, and make it available or soluble, at least to some extent. This reminds me of what I wrote for these columns many years ago, and published in "Practical Farm Chemistry," as follows: "In some cases, especially where the soil is up to our standard of fertility, and time can be allowed to make the phosphoric acid soluble, floats may answer, and will be cheapest." Our stable manures are usually but scantily supplied with phosphoric acid. When we compost the manure, and allow it to ferment and become well rotted down before we apply it, I believe that floats will supply the deficiency at least expense. I would use this material for such purposes, especially if the manure were to be used for grain crops. However, we may have also an altogether different, and to me somewhat unlooked for, use for floats—namely, as an addition to food for little chicks. This suggestion comes from the New York Experiment Station at Geneva (Bulletin No. 242). The station found that chicks to do their best need more grit and ash element than is furnished them in grain rations and in the sand and gravel they pick up naturally. The addition of sand alone to their regular rations gave good results, but the addition of Florida rock phosphate helped matters along still more markedly and strikingly. The conclusions of the station are as follows: "These experiments show plainly the advantage of a plentiful supply of ash for growing fowls, and by themselves indicate that even the tiny chicks can make profitable use of such uncommon elements of poultry diet as sand and rock phosphate. The tests, however, must not be regarded as revolutionizing poultry-feeding, nor considered as recommendations for the use of all such materials in ordinary practice. They are, rather, of scientific interest, as establishing the necessity for certain elements in the food of poultry. Those elements can be obtained easier, in better combination and in more palatable form in materials already recommended by our most successful feeders—fine raw or cooked bone. Of these, and of some animal-meal, green vegetables, clover or alfalfa, and good clean grit, every grower of young chicks should make careful and constant use."

## Salient Farm Notes

By FRED GRUNDY

**CATS AND CHICKENS.**—As soon as it is light in the morning, the little chickens, shut in their rat-proof coops, begin to "cheep" loudly to be let out. I decided that it was too bad to keep them shut in early in the morning, when they might just as well be out gathering worms, so I arranged the coops so that they could come out as soon as it was light. Everything seemed to go well for a few mornings, and then it seemed as if some of them were missing. A count revealed the fact that eleven had disappeared. That night I closed the coops, and early the following morning peeped out to see if anything could be seen that would account for the missing chickens. On one coop sat a cat belonging to a neighbor, apparently waiting for the chickens to come out, while another cat was jumping about the further coop, and occasionally thrusting its paw into the ventilator-slot. A few minutes later those two cats were going through the orchard like rabbits, each with a charge of very fine shot scattered over its hide. A few days later I saw a large cat sitting in the chicken-yard, apparently asleep. It appeared to be as harmless as a dove, and the chickens did not seem to notice it. To satisfy myself that it was as harmless as it appeared to be, I sat down behind an evergreen to watch it a while, with a gun within easy reach should it be needed. That cat dozed for about an hour. Finally a chicken came within a foot of its nose, and stood there. The cat appeared to awaken like a flash of lightning, and that chicken's head was in its mouth as quickly. The next moment its hide was like the top of a pepper-box. Two years ago I saw a pretty pet cat that we had dart out from under an evergreen, catch a chicken, and disappear like a flash. I could scarcely believe my eyes, because I had seen that same cat lying asleep on the grass many a time with chickens all about it. I came to the conclusion that no cat can be trusted among chickens.

**TEACHING THRIFT.**—Not long ago my wife said I would have to buy some flour, as the bin was about empty. My little girl overheard her, and coming into the room, asked me if I thought I would have enough money to pay for it. "If you haven't," she added, "I will lend you a nickel out of my bank." I am trying to teach her to save her pennies and nickels this year, and as soon as she has saved up three dollars I will take her to the bank to start a bank-account of her own. By this means I hope to teach her the value of money, and gradually the value of a bank-account. I think that when she comes to understand these things she will, of her own accord, save up her earnings and deposit them herself. I say earnings, because we pay her for doing little jobs that are rather irksome or require the exercise of considerable patience and perseverance in a little tot. Ordinary chores we expect her to do for nothing, but for real work that has a value to it we pay her. As she grows older we expect to pay her for doing any work that we would have to hire done—that is, aside from the ordinary housework that any girl would be expected to help do. These little sums added to her account from time to time should make her two or three hundred dollars by the time she is eighteen, and any one who has come up from the very foot of the ladder can understand what a nice little plum that will be to help over hard places. And she will appreciate it all the more because she earned it. Then, what a vast difference there is between a girl that has a bank-account of her own and knows how to do business, and one that never had a penny of her own when she was young and knows no more about the value of money or how to do business with it than a calf. To be sure, there will be many temptations to draw the larger part of these savings, and invest them in finery or a piano or something of that sort, and in resisting these temptations the girl will acquire a self-restraint that in after years may prove invaluable to her. There may come opportunities to loan this fund safely at a fair rate of interest, and these should be taken advantage of, and will mean more business experience for the possessor. She should be carefully warned against speculation, and shown the difference between it and legitimate business. All these things help so much in making a woman a real helpmate for her husband when she comes to be married.

A great deal is said about giving the boy a business education, and teaching him how to earn a living and how to spend his money to the best advantage, but the girl seems to be lost sight of. Many seem to think that the latest fad in millinery and form of dress is all they need to think and talk about, and they bring them up with that idea uppermost in their minds. We have had several "hired girls"—girls who grew up without a single idea about business or finances, and were sent out to earn their own living—and not one of them ever tried to save a penny of her earnings. They bought the most expensive goods for wearing-apparel and the finest hats to be had, attended every show they could get to, and seemed to have no more thought for the morrow than if no morrow were ever coming. Most of these girls were good-hearted and industrious, and when my wife suggested that it would be a good idea for them to save a portion of their earnings they would make a sort of an effort to do so, but the effort would be short-lived. I did not blame the girls, but those who had charge of their early training. Then, I know lots of girls who were raised on the farm, and lots more who are being raised, who have not a penny of their own and are given no opportunities to earn any. Everything they have is bought for them, and in all matters of buying and selling they are treated like small children. Sometime many of these girls will find themselves face to face with business and financial matters that will be Greek to them. I am well satisfied that the business and financial training of the girl should be equal to that of the boy. They are just as capable of understanding these matters as boys, and it is a great injustice to deprive them of it.



## Farm Theory and Practice

**RYE HAY.**—Many farmers believe that rye makes a hay nearly valueless as a feed, and their belief is based on experience. On the other hand, some of our progressive stockmen, as well as our scientists, advocate the use of rye as a soiling and hay plant. What is the cause of this wide difference in opinion? Simply the time of cutting. Just previous to the time of heading, rye possesses a nutritive value closely approaching that of clover. In a soiling-system where there must be a rotation of green crops for supplying the live stock, rye is highly valued because it is cut at the stage of growth when the stalks are nutritious. When rye is left standing until all the heads are out and the grain is in the milk, the stalk becomes woody, indigestible and unpalatable. Many years ago I made a lot of such hay, and it was the poorest stuff I ever put inside the barn for feed. This change in the nutritive value of the stalk is sudden and rapid. I do not think that the immature rye-plant makes as good feed when cured into hay as it does when green, but this is true of most kinds of plants. The point to be insisted upon is that when rye is intended for hay it should by all means be cut before a majority of the heads come into sight.

The curing of rye at this stage is slow. Several days of fine weather are required to let the surplus water evaporate. As a rule the sun is not very hot, and it is best to let the rye lie in the swath over one night—that is, for two days. It may remain in the windrow for a day or two if rain does not threaten, and then usually it is safer to put it into cock for a few days than to put it into the mow. I am now feeding such hay, and it is eaten with relish by horses.

**CLEAN MEADOWS.**—The worst weed in the meadows of our North-central states is the daisy-fleabane, commonly known as white-top. This is a biennial weed, starting usually during a very wet season one summer, and sending up its seed-stalks by the next summer. The top is branching, about as tall as good timothy, and with a white blossom. One may know whether this weed will be a pest in the hay crop by examining the meadows the preceding fall. Where the plants are thick, the thing to do is to plow the ground for some other crop. Where the plants are not thick enough to justify abandoning the sod, the white-top should be cut out of the grass during May or June. This can be done far more rapidly than one without experience would think possible. A hoe or sharp scythe should be used, and any grass so foul with weeds that a man cannot clean an acre of it in a day is entirely too foul to be left in meadow. The profit comes from having clean hay, more of it, and no crop of weed-seed for the future. The white-top plants die in their second summer, and more weed-seeds can only come from seed already in the ground or that carried to it from other fields by the wind.

Meadows would be cleaner from all filth if we should get away from the practice of turning land upside down with the breaking-plow just before seeding to grass. The plow brings up a supply of old weed-seed that has not had a chance to germinate. The summer cultivation of a crop gives the weed-seed near the surface a chance to germinate, and if the land can then be seeded to grass without any use of the plow there will be comparatively few weeds to grow.

**THE CLOVER-SEED CROP.**—One often hears the question whether it is fair to the land to cut our common red clover twice during the season, removing the hay crop and the seed crop. It depends entirely upon the land and the purpose for which the clover is being grown. One has just as good a right to grow clover for harvesting as to grow corn, oats or potatoes; but if the land is in need of fertility, and if the clover is seeded primarily with a view to building up the soil ready for a cultivated crop to follow, then it is not fair to the land to remove every bit of clover-growth that can be secured. It is true enough that the roots and the stubble of the clover will leave the ground richer than it would have been if no clover had been seeded, but they alone cannot store thin soil with all the fertility that two succeeding cash crops will require. Ordinarily it is wise to cut the first crop for hay. Early cutting will lead the plants to make a heavy second growth of tops, and there will be a corresponding growth of roots. The early cut hay makes rich feed, and the manure can go back to the land; but if the purpose of the clover is chiefly to improve the soil, a seed crop should not be harvested. A better way is to clip the second growth before it comes into bloom, and let it lie as a mulch. All the strength in it will finally go to the ground, then the mulch will promote the growth of a late seed crop, which should be left on the ground. In this way a large amount of organic matter is obtained from the growth above-ground to supplement that in the roots of the plants, and a big supply of seed is given to the ground that will germinate in future years as it is brought back to the surface by the plow.

**THE SIDE-DELIVERY RAKE.**—Farmers who are not extensive growers of hay do not invest in hay-tedders.

## All Over the Farm

In the case of clover, especially, there is need of more stirring than is usually given. The leaves on the surface of heavy bunches burn to a crisp before the clover beneath cures at all. The side-delivery rake is proving to be a valuable implement under these conditions. It loosens up and inverts clover so that air can enter it without putting a big body together, and much of the curing can be done in the windrow. The best hay is made, not in the sunshine, but in its own shade.

DAVID.

## A Cement Water-Tank

A site was selected that would afford good drainage. I then made an excavation about two feet deep, for a foundation. The tank is octagonal in shape, each side of the excavation being four feet. I put in a layer of stones about as large as a peck measure, or larger, filled up all the holes with coarse sand and gravel, wet this well with water, and tamped it well to get it firm. I put two layers of stone this way, then placed smaller stone well laid together, and slushed this with cement made of one part of Portland cement and two parts of good plastering-sand. I made the foundation about twenty inches thick, and cement about half of the depth.

I then made a form of rough lumber of eight sections for the inside, each section being two feet eight inches at the bottom, two feet nine inches at the top, and thirty-one inches wide. The ends were beveled to fit tight, and nailed together, except one section, which was fitted so that it could be taken out easily when the tank was done. For the outside form I made each section three feet seven inches at the bottom, three feet five inches at the top, and thirty-one inches wide, beveled at the ends and nailed together. Put outside, this formed a space seven inches at the top and eleven inches at the bottom for the wall. The forms were well stayed, so they could not move.

I put in a layer of stone of uniform size to suit the space, filled the holes with smaller ones, and slushed this with cement, filling all holes so as to get it solid.

The form should be left on about forty-eight hours, or less if the weather is hot and dry. The form should also be taken loose from the wall, but left around it two or three days, so it will not dry too fast. Leave dry about a week (be governed by the weather), then give two coats of cement on the bottom, inside and outside. The sand should be sifted for this. Let it dry a week before using.

Make such pipe-connections as you wish, but have the overflow-pipe so it can be easily taken out for cleaning the tank.

If the above directions are followed, the tank should be about seven feet in diameter at the top, two or three inches less at the bottom on the inside, and thirty-one inches deep, and should have a capacity of about twenty barrels of water.



CEMENT WATER-TANK

I am unable to say how much freezing this tank will stand. I have a tank-heater to put in mine, and will take no risk.

The material used was about ten perch of stone, one load of coarse sand and gravel, one load of cement-sand and four barrels of Portland cement. The only expense was for the cement. Being a Jack of numerous trades, the work was done by myself.

J. L. NEFF.

## The Abuse of Land

Three years ago I turned over to a cropper to work on shares a field that was mellow and fertile. This year I am working it again myself, and find a complete change has come over the character of the field. I left it full of life. The sowing of the seed was an earnest of the harvest. I get it back bare, compacted and hard from excessive tramping by stock late in the fall. There was no cover-crop given it for winter protec-

tion. My plow turned it up cloddy, cold and unyielding. There was apparently no effort made to maintain the former fine condition of arability, and if I shall succeed in growing a good crop on it I will be agreeably disappointed. It is now planted to early corn for soiling, and after being well manured as the crop is removed, it will be plowed for sowing to wheat and crimson clover for a mixed soiling crop to follow rye next spring. After the wheat and clover are cut the land will be again manured, disked and planted to cow-peas for a late soiling or hay crop. This treatment will gradually bring back the light-heartedness of my field. Ordinary care and sensible rotation would have kept it as I had it three years ago. The abuse of land is one of the unpardonable sins of farming.

## The Story of the Auction

"Going over to the vandue?" a neighbor called over to me from the road the other day.

I had not heard of the sale, and asked about it. The man who was selling out lived a couple of miles down the road from me, and it did not seem to me that I cared to go. Such scenes as are presented at these frequently occurring public sales do not appeal to me as they seem to appeal to some.

This particular auction brought a peculiar sense of sadness to my heart. I knew something about the circumstances leading up to this tearing-down of the old home, and they all came up to my mind fresh that morning as I stood at the fence speaking over to my friend, who was on his way to the "vandue."

This neighbor and I had been boys together. I used to think he was about the smartest fellow I ever knew. Really he was as bright as a new dollar. He was quick as a flash to see a point, and sharp at saying things back when he was drawn into an argument. After he became a little older he was just as keen about the farm-work. He could do anything that anybody could. He could harness a horse when he was so short that he had to get up on a box to reach the animal's head. He knew how to do everything.

What happened to the boy? Well, his father gave him a calf. The calf grew into a cow, and a good one. When it was at its best the boy sold it for a big price. He was then well along toward one and twenty. About that time he went out to do for himself, putting the money received for the cow in the bank. But somehow the boy grew smart—so smart that honest men did not care to have anything to do with him. Money earned at hard work he put into a horse, and set out to get rich trading horses. Few men can follow that up and come out as well as they went in. That was the case with the friend of my boyhood days. In a little while he took the money the cow brought, and spent it, with a great deal more, for things that never seemed to count for much.

He bargained for a farm—the one that was now to be laid open to the public gaze at the auction. He could not pay much down on the farm. A good friend helped him to clear up the mortgage, so that at that time he stood out of debt. But it did not last. Soon another heavy mortgage was put on the farm. Horses came and horses went on the place, and it was noticeable that the more they changed the poorer they were. Every single thing the man had in the wide world was under mortgage. He borrowed money wherever he could get it, and no one seemed to be able to guess what became of it. Probably it was a case of robbing Peter to pay Paul.

So things went on from bad to worse, until the poor fellow admitted that he never could get out of debt in his life. Creditors began to crowd him to the wall. Then came the sale and the breaking up of home ties.

I cannot help thinking there is something here for all young men to profit by. The lesson is this: It does not pay to get too smart in this world. Better be contented to work along in a quiet sphere than to try to soar among the stars and come down with a crash that knocks the life out of a man.

E. L. VINCENT.

## The Home Beautiful

Among the recent farmers' bulletins issued by the United States Department of Agriculture but few will prove of more real value to the owners of farm and suburban homes than will Bulletin No.

185, entitled, "Beautifying Home Grounds." It is a bulletin which was much needed by farmers' wives, sons and daughters, upon whom the beautifying of the home has so long depended. The illustrations given on page twelve for the proper grouping of shrubbery for producing the most pleasing effects during the growing-season, and the best location for them, as shown by the general plan on page six for planting the best shade-trees and the shrubbery referred to, will serve as a correct guide to all not familiar with the best method of arrangement. \*

## A New War-Story

will start in the June 15th issue of FARM AND FIRESIDE, and it will be one of the most interesting and best war-stories you ever read. It is entitled "Two Girls Against Eighteen Thousand Men." It might surprise you to know which won. It's a good one, anyway, and you want to look out for it.



## Gardening

By T. GREINER

**C**ELERY WHEN QUITE SMALL transplants easily. If people knew how simple it is to start plants in flats, and transplant them in sections to the open plant-bed when only an inch high, many more home growers would raise their own plants.

**RICH SOIL** makes the "fat" asparagus-stalks when the latter are given plenty of room. You cannot get them by crowding plants on any soil. I give them two feet in the row, and make the rows five feet apart. When the soil is a rich old garden-spot it is questionable whether even deep trenching, and filling the trenches with manure, will have great effect or give much larger stalks.

**CHEAP TOOLS** are a delusion and a constant source of annoyance. Lately I bought a few of those cheap garden-trowels in one of our department stores. Like all tools made for a cheap trade, they are cheap, cheaply made, and poor. The blade slips out of the handle, and when you have once worked with such an implement, or rather such a poor imitation of an implement, you will be ready to throw it on the rubbish-pile, and get a good substantial garden-trowel, such as most seedsmen keep. You pay a good price, but you get a serviceable tool.

**ASPARAGUS** is certainly a paying crop. One would not have to exert himself very much to sell the product of a quarter-acre right in this immediate vicinity. People will come after it when they know they can get it, and when our stores are willing to pay seventy-five cents for a dozen small bunches it means good money. At this rate each stalk brings about half a cent. I cut to-day as many as a dozen stalks from a single asparagus plant, or hill, and I can cut every other day for six weeks, although the price will probably get somewhat lower during the latter part of the asparagus season. On the whole, the money from asparagus seems to come easy, and there is never a failure. Year after year it grows, and it pays.

**IN TRANSPLANTING BEET-PLANTS** from the greenhouse or hotbed, for the purpose of growing extra-early table-beets, more care and painstaking is required than in transplanting celery, onions, cabbage or most other things. The beet-plants are yet small, and they often wilt badly. The plant-bed should be thoroughly watered, so that the plants can be pulled up with all their roots intact, and if possible with a little soil adhering to them. When to be put into the open ground, this should be freshly prepared, and therefore moist and fine, and the soil must be well firmed over and against the beet-roots. After a few days the young plants will take a new hold, and soon develop into salable beets. I find the crop profitable.

**EARTHWORMS IN FLOWER-BED.**—Mrs. H. C. R., of Belgrade, Mont., complains of the presence of large numbers of earth, or "fish," worms in her flower-beds. She says they work the soil up in little lumps, and seem to take the nourishment out of it, and last year they almost destroyed a bed of dahlias. I doubt very much whether these worms do a great deal of damage. All experts agree on the perfect harmlessness of this ugly creature. Wherever the soil is very rich or filled with decaying vegetable matter they will be found in large numbers. We credit them with being soil-improvers rather than with taking the plant-foods out of it. If you don't want them, however, you have in fresh-slaked lime an easy means of getting rid of them. Apply the lime freely to the surface, or mix it all through the soil, and the worms will leave quicker than they came.

**THE RADISH-WORMS.**—As usual, I have drilled radishes between my early cabbages. It is a good chance to test the various devices for keeping the worms off. I left one row untreated. Common coarse salt was sprinkled over another row. Several rows were planted with a mixture of seed and flowers of sulphur, while sulphur was sprinkled over some other rows after the seed was sown. Other rows were treated with acid phosphate, scattered over the surface after sowing. Now, if no maggots happen to come on this planting, the whole experiment of course will be without result and value. If they do come, it will be interesting to note whether any treatment of this kind will keep them off. On some rows I expect to try my usual remedy—namely, tobacco-dust scattered freely over the plants as soon as they show well above the ground. It has seemed to have some repelling power for the radish, or cabbage, fly before, and I have much more faith in it than in the others here mentioned, sulphur included.

**MANURE CROP AFTER EARLY POTATOES.**—R. C. R., of Bussey, Iowa, tells me that he has planted four acres of early potatoes, and would like to know what crop he could plant after the potatoes are dug to have something to plow under for manure; also, what is considered a good crop of early potatoes on good rich upland. I do not know whether or not our friend keeps sheep or a good lot of hogs. If he does, it might pay him to sow rape (Dwarf Essex) on his potato-land after the crop is harvested, and use this for pasture or green feeding. Rape is a crop that is not appreciated in this country as it deserves. Of course, it would not add much humus to the soil. To enrich the soil, some leguminous crop must be selected. This may be cow-peas if it is early enough (which is doubtful), or it may be crimson clover if it will winter in that particular locality; or it may be hairy, or winter, vetch. The latter is one of the best things for such purposes. It can be sown in August, at the rate of a peck to the acre, and will cover the land with a thick mat of green stuff that can be plowed under early in spring. In this vicinity we consider a

crop of two hundred bushels of early potatoes a good and satisfactory one. Occasionally we secure a larger yield; most people, as an average, grow less.

**WINTER AND WELCH ONIONS.**—People like green onions in early spring, and of course the earlier the better. The onion usually grown for these first-early ones is the Egyptian, Tree, or winter, onion, which is as hardy as an iron fence-post. As to flavor, the less said the better. It is a green thing, and good enough for its purpose when you have nothing better. It is easily grown, and when once planted may be made to yield increasingly big crops year after year. This onion is grown from top sets planted in August. The Welch onion is another entirely hardy onion which can be grown cheaply in quantity. It is started from seed sown in the spring, and will make great bunches of green onions by division the next spring. It is strong enough to suit the Italian taste, and in my family a few of them go a great way. We use them sparingly in soups, potato salads, etc., and for such purposes they are all right. People with a pronounced liking for onion-flavor can eat them with bread and butter. If they can be readily sold in bunches at the usual prices it will not require a long row of them to bring five dollars. Possibly they may be quite profitable. I hardly know where seed is to be obtained. The seedsmen do not generally list it.

**GROWING MUSHROOMS.**—A reader writes me that he would like to grow mushrooms, and asks for information how to do it. Many of us, I take it, would like to grow mushrooms, but only a few do it. Many of those who try it make a failure of it. In an artificial way, the time for making the beds is in October, November, December and January, and the crop is harvested during the winter and early spring months. I have had good mushrooms on the greenhouse bench, where the boys had inserted a few pieces of spawn. I often failed to get a crop in the most carefully prepared manure-bed under the benches. The wild mushroom grows in old pasture-lots during September and October. It is a rather easy thing to plant them in a rich old pasture, where the sod is old and tough, and have them come on in their own natural season. Buy a few bricks of spawn, but be sure of its freshness. Every seedsmen keeps it. Break or cut the bricks into pieces as big as a small hen's egg, and insert a piece under the point of a triangle of sod cut and lifted up with a sharp spade. Select the richest spots or knolls for this, and put the pieces several feet or a yard apart. June is the right month for this work. The spawn will run during the hot summer weather, and the mushrooms will make their appearance when the nights get cool, especially after a light rain during the night.

## Fruit-Growing

By S. B. GREEN

**UMBRELLA-PLANTS.**—B. S., Ossian, Ind. Umbrella-plants are of the easiest culture. The best way to grow them is to keep the roots entirely under water. For this purpose a good way is to grow it in a small flower-pot set in a jardinière which is kept pretty well filled with water. A few drops of ammonia added to the water from time to time will probably be all the nourishment it will need. Of course, they do best when they have a reasonable amount of sunlight and are not subjected to the fumes of illuminating or coal gas.

**BAGGING GRAPES.**—J. H. W., Lexington, Va. The simplest way to bag grapes is perhaps as follows: Get some one to two pound sacks of common manila paper, and while they are in a bundle cut off a very little of one corner, to allow for drainage. Cut them down about two inches at the top on each side, so that they can be slipped up over the bunches, inclose the grape-bunches in the sacks, draw the paper up over the branch, and fasten with a single pin. These common sacks seem to answer about as well as those that are more expensive, and I have sometimes had them last for two years.

**DAMAGE DONE BY MICE.**—Many of our gooseberry and currant bushes, young trees, raspberry-canecan, roses, etc., have been girdled by mice, and will die. Mice had to live. Fortunately, winters of such length and severity as the one just past are rare, and for that reason we have heard very little of damage done by mice girdling trees and bushes. But this year the loss is large, really enormous, amounting to millions of trees, and probably millions of dollars. Hereafter we will do well to "mound" our young trees, or surround their bodies near the ground with a ring of fine-meshed wire netting.

**UNFRUITFUL SEEDLING GRAPES.**—G. H. D., New Orleans, La. Our native grapes are quite often unfruitful. This may be due to a variety of causes. Sometimes it results from all the flowers being staminate, and in the Northern states the common river-bank grape of this kind often makes enormous growth and produces no fruit at all, while the fruitful kind makes but a small growth of wood. Some of the hybrid-grape seedlings have weak flowers, but they will produce fruit in the vicinity of other vines that have a large amount of pollen and flower at the same time. I am inclined to think that if you have a vine that is eight years old, and has not produced fruit, that it is not worth bothering with if fruit is what you are after.

**GENERAL TREATMENT OF INSECT-PESTS.**—F. S., Cleves, Ohio. In the general treatment of insects it is well to classify them into those that suck and those that eat. This is a convenient division, on account of the fact that these different classes of insects require a different class of destructive agents. The sucking insects, such as the leaf-lice and mealy bug, are best destroyed by a strong irritant or some of the oils. Paris green, London purple, hellebore and other similar poi-

sons have no effect upon this class of insects. The other class of insects includes most of those that are pests of the garden, and are what is known as biting insects—that is, they obtain their food through regularly formed mouth-parts. Such insects are usually destroyed by the use of Paris green, London purple, etc. Of course, the peculiarities of each insect has to be taken into account in each case, but this will do for general instructions as to the application of insecticides. If you will make your inquiry more definite I can perhaps assist you better.

**SAN JOSE SCALE ON PEACH.**—C. F. E., Rodney, Miss. I note that you have planted peach-trees, and that the officers of your experiment station have declared them to be infested with San Jose scale. Your treatment of cutting them back to about one and one half feet, and then scrubbing them with a strong sulphur-lime-salt solution, should have removed or destroyed all the scale, and I think you will run no risk in allowing them to grow; but in any case they should be watched to see that you have really done a thorough job. As a rule I think it best when such young stock is infested with San Jose scale to destroy it by burning, and start anew, since having such stuff on the place at all is a good deal like playing with fire. Such treatment of nursery stock that is received would undoubtedly be effective, but a far better way would be to see the stock in the nursery before it is bought, and there determine that it is free from this pest. I do not know that there is an inspector, or even a law requiring inspection, of nursery stock in Mississippi, but if there is not the fruit-growers and nurserymen should combine together to get such a law, or the fruit and nursery business will soon become in bad repute.

**SCALE-INSECTS.**—J. W. M., Cincinnati, Ohio. The twigs which you sent on are infested with at least two kinds of scale. One is what is known as the oyster-shell bark-louse, and the other the San Jose scale. These are both very troublesome insects, and require very thorough treatment to prevent them from doing serious injury. This is a poor time of year to treat them. The best way to destroy these insects is by spraying them while the tree is dormant—in the latter part of the winter—with what is known as the lime-sulphur wash. Spraying the apple and quince before the leaves come out with kerosene-oil on some bright day in winter, when the oil would evaporate quickly, would probably be effective. Probably the best treatment for you under the present conditions would be to wash the trunk and larger branches with the lime-sulphur wash, or with a small amount of kerosene, working it into the crevices with a brush, but do not use enough to soak the ground about the tree. Then spray the smaller branches thoroughly several times during the season with strong whale-oil soap or kerosene emulsion. The quince branch with the eggs on does not seem to be infested with any scale-insect, and the large eggs are those of the common katydid, which do not cause any serious injury to the trees.

**MOVING FERNS—MEALY BUG.**—A. B. Y., Enon Valley, Pa. There are many kinds of ferns, and quite a difference in treatment is required by them. As a rule, most of our native ferns do best in a rather cool, somewhat shady location, but the strongest kinds will often thrive very well even in direct sunlight, provided they have a reasonable degree of moisture. Where it is desirable to form hardy borders made up largely of this class of plants, they may be taken directly from the woods early in the spring, or just as soon as they show a little growth so that they can be found. Treated in this way, and set in soil that has been prepared by adding to it a large amount of leaf-mold, or better yet made up entirely of good soil from the woods, they generally do very well.—The mealy bug, which is often quite a pest in greenhouses, and is occasionally troublesome in dwelling-houses, also, forms bunches of mealy, stringy matter in the axils of the branches and leaves. In this mealy matter there is generally a large number of eggs, which hatch, and the young spread to different parts of the tree. The best treatment for destroying them is probably to use a strong suds made from whale-oil soap. Use a soft tooth-brush for applying it, and for removing the bunches of scales from the plant.

**TREES NOT BEARING.**—M. A. P., Keuka Park, N. Y. I do not understand why it is that so many of your fruit-trees are not productive. The reasons for this peculiarity of trees are quite various. Sometimes plum, cherry or peach trees may not fruit on account of the blossoms being all staminate; then, the same results may be produced by late frosts, and I am inclined to think that in the case of the prune-tree to which you refer that it may be something of this sort that has prevented its bearing fruit for several years. Occasionally trees grow too vigorously to produce fruit, and something that will check their growth will throw them into bearing. For instance, I have had trees of some varieties of Russian apples that had not borne fruit at all when twelve years old, and yet they have grown vigorously and were large trees. In such cases I have sometimes girdled them with a cross-cut saw, just running it through the bark, and spirally around the tree, so as to have the cut stop three inches below where it started. In doing this, cut through the bark and into the wood a little. If this is to be done, it should be attended to sometime between the middle of June and the middle of July. Treated in this way, I have brought very obstinate cases into bearing. You see from what I have written that it is quite out of the question for me to answer your inquiries definitely.

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## Uniformity in Flocks

**O**N MANY farms the fowls seem to lack uniformity of size and color, and differ also in general characteristics.

It is difficult to find a farm upon which is kept a uniform flock of fowls, though there are some enterprising farmers who know the advantages of the breeds, and make poultry pay. It is easier to secure uniformity in fowls than it is with larger stock, as the various breeds of poultry multiply rapidly, and but a single season is required to make a change. Farmers who are interested in better poultry, and in having the birds lay more eggs, as well as to produce better carcasses for market, should not be satisfied with motley flocks of nondescripts, ranging in size from the bantam to the Brahma. Time and labor are saved when the flock is uniform in characteristics. The same care and food are bestowed on the mixed flock as are required for the pure-bred birds, yet they do not always require the same foods nor give the same results, and the method used for the small hens may not be suitable for those that are larger. The one kind may be very active and the other indolent, and they cannot be made as prolific as may be desired when kept together. There is at least uniformity in the pure breeds, and while individuals may differ, yet the opportunities for the success of the flock which is uniform are greater than when the flock consists of members which differ widely. One way to improve is to buy a trio of fowls this fall, and use only the eggs from the hens of the selected breeds next spring when hatching out the new stock. When selecting a breed it will be found that, so far as the "best breed" is concerned, the farmer or poultryman must be governed by circumstances. In the suburbs of cities, towns and villages it may be desirable to combine prolificacy with contentment during confinement—that is, the birds should not be capable of flying over an ordinary fence, nor desire to do so. Something depends on the condition of the fowls. If kept busy scratching they may not care to go beyond their yard, but if idle they soon learn vices, such as pulling feathers, eating eggs and flying. Flying is also a matter of education to a certain extent. The first one attempting it sets the example to the others. A Brahma or Cochin will not fly over a four-foot fence, and some will refuse to go over a two-foot fence, especially when they are fed all that they can eat, and are fat and lazy. They will, however, also go over a five-foot fence. A Leghorn (if it knows it) can fly over a house. Wild, untamable birds will not stay on the inside of any fence. True, the wings may be cut, but even then a Leghorn can get up in the air some. These facts teach that in order to gain in one direction something must be sacrificed in another. The "best breed"—one without at least some undesirable traits—has not yet been found.

## Methods of Keeping Fowls

Many farmers turn their hens out to forage, and give them no attention. Such a system is unprofitable, as the farmer loses some of the eggs, and also a large proportion of the chicks. When the farmer is too busy to attend to the fowls he will not find them profitable. Even if the flock has the run of an orchard, it must have shelter and protection at night, and lice must be kept down. It is claimed by some that it is more profitable not to confine the hens, because it is more difficult for a beginner to manage a flock in a yard than when the hens are at liberty, as he must supply all their wants and must understand how to avoid mistakes, especially those of overfeeding; but it is maintained, on the contrary, that if hens are on a range they will instinctively care for themselves, and in so doing save the beginner many annoyances. A large number of farmers keep their hens up to prevent depredation in the garden, although the hens do not damage the garden as much as may be supposed, but destroy many insects. If a hen with a brood of chicks secures an opportunity to scratch up a garden that has been newly planted, they will make sad havoc with the seeds and very young plants; but as soon as the garden is well under way it is as safe from the attacks of hens as a field crop would be, as the hens will busy themselves with insects, tender grass, germinating weed-seeds, worms, and other delicacies which they prefer. The proper mode of management depends upon the farm, the principal crops grown, the climate, the number of fowls and facilities for transportation to market. It is difficult to frame rules that are applicable to all conditions. There is almost a sure profit to be derived under nearly all circumstances, as a flock of hens is capable of saving certain portions of crops that cannot be sold to advantage, such as seeds, grass, veg-

## Poultry-Raising

By P. H. JACOBS

etables, small potatoes, etc. There is at all times on the farm a lot of valuable refuse which cannot be saved except by the use of poultry. It is true that other animals are also serviceable in that respect, but the hens give more immediate returns, supplying eggs daily, and bringing in cash when there are no returns from other sources. In keeping a flock of fowls the object should be to feed nothing to them that can be sent to market, as long as there is something unsalable that will answer the purpose. Economy adds to the profit, and one of the chief purposes in keeping a flock is to utilize the waste products. It is the capacity of the hens to seek their food that reduces expenses and increases the profit.

## Quality of Whitewash.

To have whitewash on hand at all times and ready for use means a clean, light and cheerful poultry-house at all seasons of the year. Many persons consider lime as "lime" the world over. They do not take into consideration that much of the lime found in the United States contains more or less carbonate of magnesia, which neutralizes the adhesive qualities when converted into whitewash. Pure white lime should be selected, and should be slaked several weeks before being used. It would be an excellent plan to slake lime in the fall for use in the spring following, which should be kept in the hydrate state in air-tight vessels during the winter, being sure to keep the lime covered with water and keep it from freezing. When the time comes for whitewashing during the spring, the lime is then thoroughly slaked and ready for use, retaining its adhesive qualities, which have been improved by the time given it. To properly slake lime, use three pints of water to one pound of lime. Lukewarm water is the best, which is not always to be had when slaking large quantities of lime. If slaked in a box or vessel, put the necessary quantity of water in first, then put in the required amount of lime. During the progress of slaking it is well to cover the box or vessel, to retain the heat of the lime, and the same should be stirred occasionally for the purpose of changing any unslaked lime, so that all will receive its share of water. One pre-

fowls to become in-bred, and take no care regarding the uniformity of the flock, or of the eggs and dressed carcasses derived therefrom. If a compar-

ison of the merits of the pure breeds and mongrels be made, and one will estimate the price of eggs for one year at twenty cents a dozen, the flock to number fifty hens, the difference of only one egg a month from each hen (a dozen eggs a year) will entail a loss of ten dollars. Will it not pay, then, to use a breed that will permit of each hen laying such a small addition as only one egg more a month. Viewed from this standpoint, the common hen is a costly luxury. Good grades or selected cross-bred birds are not usually classed as "scrubs," but the common barn-yard fowl, that is bred from any source or by accident, cannot be relied upon. The pure breeds can be made to perform the service characteristic of the breed selected, and when the farmer gives poultry the same attention in breeding as is devoted to larger stock he will find that in proportion to capital invested poultry will prove the most profitable stock on the farm. Even when common fowls only are kept, they deserve good treatment or should be discarded.

## Beauty and Utility

There is no reason why the farmer should not prefer the birds of beautiful plumage, provided he secures the desired results, and in fact it is no more difficult to care for choice specimens than to bestow work on birds of no uniformity; hence, if one can secure a good breed, it is not a mistake to devote some little attention to the plumage, provided the matter of color of the plumage is not given the preference over utility. On black soils the white birds show effects of such on their plumage, and do not appear as bright and clean as they would if located on a light, sandy soil. As one who takes an interest in the pure breeds delights in having attractive birds, they being no more difficult to keep than nondescripts, a preference is given those breeds which show to the best advantage. On light-colored soils the black breeds are more ornamental than the white, while the buff-colored breeds will in such cases show less soiling of the plumage. On a neat lawn, in the spring-season of the year, a flock of Light Brahmas will add a pleasing effect, and their black tails and partly black hackles render them even more attractive by the con-



IN THE POULTRY-YARD

caution is not to put the lime in the vessel first, and put the water on by turning it in from a hydrant or pouring it in the buckets, as is the common practice, for by such method the lime will become granular and lumpy. To preserve the adhesive quality, or the plasticity, of the lime, it is very important that the proper proportion of lime and water shall be placed together at the outset, which will slake the lime to a paste, and not to a powder. After the lime shall have been slaked to a paste it can be reduced to a proper consistency for whitewashing by adding more water.

## Pure Breeds and Mongrels

The farmer or poultryman who does not properly care for his flock of common fowls is not a fit person to have pure-bred birds. Farmers give but little recognition to the breeds of poultry, although they recognize the importance of breed in animals. They permit their

trast. The Partridge Cochin and Brown Leghorn hens when together make a pretty contrast in sizes of birds, but in color they are very similar, especially to a novice, and they seldom show the effects of dirt on the plumage.

## The Roosts

Roosts for heavy fowls should be wide. A four-inch-wide board one inch thick will be better for large Asiatics as a roost than anything else, but the small breeds will be satisfied with a round pole, or a piece of three-by-four scantling rounded on the edges. The largest breeds prefer to have a support for the breast, as it tires them to hold the weight of the body entirely on the legs.

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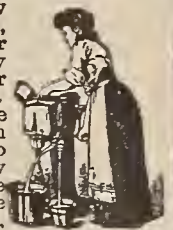
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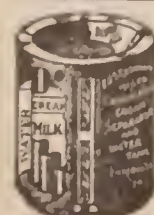
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## Live Stock and Dairy

### How to Breed, Feed and Care for Hogs with a View to Profit

NO FARMING industry during the past few years has produced better results than the breeding and raising of hogs.

I do not intend to discuss any special breeds in this article, but I must say that the best breeds are those which feed best.

While it may not be of any great importance to choose particular breeds, it is very desirable that special care be exercised in the selection of sows from which to breed.

Endeavor to select sows of strength and activity. If they are strong they are better able to resist disease and endure the fatigue which naturally comes at the time of farrowing. If active, they make the best feeders. They should also be of good length, with small head and ears, back slightly convex, broad shoulders, square hams, and with legs not too short and well under the body. If the legs are very short the sow is apt to injure her progeny during gestation. If bodies are short they will not produce the required amount of bacon.

A feature which must not be overlooked in a breeding-sow is the number of teats. She should have a dozen at least. It not infrequently happens that a sow will bring forth a litter of a dozen, and have only ten teats for them. The best breeding-sow, other features being equal, is the one having the greatest number of teats.

The size of the sow should also be considered. One less than two hundred pounds weight is too small. I would prefer one of three hundred pounds, and not less than twelve months old at the time of breeding.

The male hog should not be less than eighteen months old, with straight back, and should be heavily shouldered and hammed. In other features he should be similar to the sow described. As it is physiologically true that animals sired by one past his meridian of strength are less active, more liable to disease and have less strength to overcome it, a male hog of more than four and a half years is not desirable from which to breed.

As a rule dark-colored hogs are much harder than white ones. At one time my brother and I owned some three hundred, about equally divided between black and white. They were all treated alike as to feed, water, pens, etc. A disease attacked them, which took away one third of our herd. Of those that died not one was black. Some of the black ones became sick and recovered, but not so with the white.

When we saw them dying so rapidly we concluded that something must be done or we would lose all. Coal-tar was diluted with water, and sprinkled over every place where the animals could eat or sleep. We saw an immediate improvement, and lost no more. At the same time we placed a mixture of wood-ashes, sulphur and salt here and there where the hogs could have access to it. Since that time I have not lost a hog from disease of any kind, and I would certainly advise every farmer interested in growing pork to use the following inexpensive mixture freely: To every ten pounds of wood-ashes add five pounds of common salt and one pound of sulphur, and mix thoroughly.

The statement concerning color is given only as my experience, and not to set forth an undeniable fact that white hogs of every breed are more liable than are the dark to succumb to the attacks of disease.

Taking into account accidents which may occur, I would expect to raise one hundred pigs from ten sows, each farrowing once, or two hundred in twelve months. A good breeding-sow will generally bring forth five litters in two years.

During the time of gestation there is greater danger of feeding too much than too little. It is generally considered bad to allow sows to become too lean at such times, but worse to have them too fat. Nearly every farmer has learned that too rich food lavishly given often proves disastrous. It is always well to have a good supply of roots, rutabagas, carrots, beets, etc., and a moderate supply of grain and peas. Corn and peas are the best, but do not feed them without grinding or chopping.

I learned early in life that it was dangerous to allow sows to become very hungry near the time of farrowing. I have known whole litters to be lost from this cause. If the sow is very hungry she is apt to become ravenous, and then the young pigs are not safe unless the unnatural mother is constantly watched for several days and until she allows them to feed according to Nature's plan,

taking pleasure in doing so. It is a common saying among farmers that when a sow has once destroyed her young she is never safe to breed from again. This is not true. One of the best sows I ever saw destroyed her first litter. She afterward gave us over one hundred fine pigs, and her maternal instincts were exactly right. I am quite confident that the result would have been different with the first had she been properly fed.

In the winter-time, when green food is scarce, rutabagas are good, but only good. Carrots and potatoes are better. Mangels and sugar-beets are best. In summer, when green food of all kinds is plentiful, grass is good, clover and alfalfa are better, and green sweet corn the best of all.

As soon as the pigs are farrowed it is necessary to increase the supply of food of all kinds. Considering the price, there is no mill-feed better than middlings. These I would feed with the green stuff or roots, continuing to increase the supply until the pigs are weaned, and I never would leave them with their mothers one day after they are two months old. They will eat more or less of the food named while with their mothers, and I would continue their use, adding milk when convenient, as much as they will take at first, say a quart a day for each pig, diminishing the quantity week by week for a month.

When milk for young pigs is named, sweet milk is to be understood. Fresh buttermilk is excellent for hogs, but the common practice of feeding sour slops or swill cannot be too strongly condemned. The refuse from the kitchen should not be wasted, but it is better to destroy it by fire than to allow it to ferment and then feed it to pigs. We often see fine, thrifty pigs retarded in their growth—actually stunted—by being fed soured swill, which is not fit for any animal under the sun.

The pigs are now supposed to be three months old. Continue the middlings, varying the other foods according to the season. In the summer give them all the green sweet-corn stalks they will eat, and they will eat it all to the root until the corn is ripe. About this time pumpkins are excellent. It is the sugar in them, as in the sweet corn, which makes them so good for food. In all my life I never found anything fed in its raw state which would cause pigs to grow and thrive better than the green corn-stalks, and no grain will make sweeter pork than Indian corn when properly fed.

The cooking of food for hogs or pigs is to my mind worthy of consideration. Some undertake to say that the extra work necessary in the cooking is not paid for. My experience proves the very reverse is true. It became my constant practice to cook everything except the green feed, and I am certain that my success proved beyond all question, and justifies the statement, that I was abundantly paid for my work. I always used a moderate quantity of salt in the cooked food.

Some seem to think that so long as pigs get wet or sloppy food they need no drink. This is a mistake. They require, and should have, a plentiful supply of clean fresh water, and this in all seasons and in all conditions.

As soon as the pigs are weaned, special care should be observed in feeding the mothers. Luck is a poor stick to depend upon. Give them dry food and water, and they will become dry in a few days. Then give them plenty of corn or pea meal (cooked, of course), when they will be ready to breed again in a short time.

As to pens and yards for the various conditions in hog-farming, it is desirable, but with the average farmer impracticable, to have a change with each condition. All pork-producers will agree with me that one of the best-paying features of the business is cleanliness—cleanliness first, last and always.

For a herd of ten sows and their pigs I would have a house not less than sixty feet in length by thirty feet in width. I would have five compartments on each side twelve by twelve feet. This would allow an alleyway six feet wide extending the entire length of the building. Each compartment should have a self-adjusting door of sufficient size to allow all, great and small, ingress or egress at pleasure. The floors should be of concrete, and the feeding-troughs of the same material.

The sleeping-rooms should be made in such a manner that the compartments named above will not be smaller except for space required for steps. These sleeping-rooms should be suspended from the girders or joists, using strong scantling and planks with which to build,



## Live Stock and Dairy

and not less than three feet from the ground floor, having strong and solid steps or stairs, up and down which the pigs must walk. They very soon learn to do this, and seem to enjoy it. The size of these sleeping-rooms should be twelve by six feet—just one half the size of the feeding-compartments.

It is necessary to have bedding in the sleeping-rooms, but not too much straw at the time of farrowing. This scarcity of straw is to save the lives of the young pigs, as they are apt to go under the straw if plentiful, and get crushed by the mother. Many farmers take another precaution. They fasten four by four scantling all around the walls of the sleeping-rooms about six inches from the floor.

The sleeping-rooms, feeding-rooms and troughs will become filthy if used, but we are criminally negligent if we allow them to remain so.

It appears necessary that pigs have free access to the ground every day. Any one who has undertaken to raise pigs without allowing them to touch the ground has probably found his mistake. They should have yards, as well as feeding-rooms, as large as possible consistent with economy. To insure safety the doors of the feeding-rooms should open into pens each several times larger than its corresponding feeding-room, and all these ten pens should have gates leading into a common field, where they can all roam at the pleasure of their owners. If this field has a stream of fresh water accessible to the pigs, so much the better, and if partially shaded with trees, and four or five acres in extent, it can be classed as very close to perfection.

I would expect pigs bred, housed and fed as herein described, and six months old, to weigh two hundred pounds for small breeds, and three hundred pounds for large breeds. I give such a result as my own experience. I have had pigs at that age weigh three hundred and fifty pounds. Then everybody wondered. At the Michigan State Fair in 1883 my brother and I made nine entries—large and small breeds, pure-bred and grade, two boars, three breeding-sows, and four pens of pigs. They were a surprise to all, and especially so to competitors. We captured nine first prizes.

Our pigs did not get as good treatment as I have asked for them in this article, but there were several conditions in their favor. They had plenty of room. The Thread River ran along two sides of the square field in which they were kept. On another side was a natural grove, to which they had access during

and hauled to the barn conveniently for feeding. I find a low-down wagon very useful for hauling the crop, as by it the labor of loading is reduced to a minimum; and farm-labor is always worth saving. It is supposed that the crops being grown for green feeding are as near to the stables as possible, in which case it requires but a short time to cut and haul the feed for two days. Where the land is to be planted to a second crop, a load of manure may be taken to the field when going for the feed, and the time-saving profit of the "back load" be realized. By the second day the green feed will be found to have heated somewhat. The cows will not object to this, and there will be no material loss of feeding value. When fermenting, however, the forage should not be disturbed until feeding-time. The loss from heating will be largely of moisture, but there will be a compensating gain in transmutation of starch into sugar.

Land uncovered of crops up until the latter part of June, if fertile and worked into good tilth with a disk, may be profitably planted to sugar-corn, Hungarian grass, cow-peas, soy-beans or rape. If uniformly good results are to be expected from feeding soiling crops, their feeding must not extend into the ripening stage. As soon as one crop begins to lose its greenness, another should be ready to take its place in the succession.

W. F. McSPARRAN.

### Notes on Feeding-Stuffs

The term "nitrogen-free-extract" is likely to be misunderstood by the average reader as applied to the discussion of the constituents of feed-stuffs. Nitrogen-free-extract consists principally of starch, sugar and gums, and is the exact opposite of nitrogenous matter. Protein, likewise described as nitrogenous matter, is a group of food substances containing nitrogen, from which flesh, blood, muscles, tendons, etc., are formed. Nitrogen-free-extract does not contain nitrogen, but the opposite properties of feeds, and along with fiber makes what is known as carbohydrates. The carbohydrates of food furnish the animal with fat, and are burned up in the body to produce heat and energy. Corn, for instance, contains a small proportion of protein, or nitrogenous matter; however, it contains a large amount of nitrogen-free-extract and fiber, or carbohydrates. On the other hand, clover and cow-peas contain a large percentage of protein, or muscle-producing properties, and a relatively small proportion of nitrogen-free-extract, or carbohydrates.



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hot or very cold weather. The river afforded plenty of water for them to drink, or to bathe in when they were so inclined. A common remark at the fair was, "How clean your pigs are!"

J. B. McINTOSH.

### Summer Feeding

To get the best results from feeding cows soiling crops the feeding should be done in the stables, where the share of each cow can be given her in her manger, and from where she can eat it without fear of being banded around by the stronger animals. When we come to study the inclinations and habits of our cows closely, we learn that any unusual excitement or any abuse is sensibly recorded at milking-time. From both a humanitarian and a business point of view, gentleness is best with the cow.

Enough of the soiling crop being used should be cut at a time to last two days,

In studying the farm value of different forage crops their manurial value should not be overlooked. The manure from a winter's feeding of cow-pea or clover hay will be far richer in manurial value than from corn fodder or timothy. As nitrogen is the most valuable constituent of the feed-stuff, so it is the most valuable property in manure. G. E. M.

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## Farm Notes

**A**TEN-THOUSAND-BUSHEL crib of ear corn at Decatur, Ill., when shelled showed that seventy-four pounds of corn in the ear was required to make fifty-six pounds of shelled corn.

Secretary Wilson's inquiry, "Who profits by the high price of meat?" is a very timely, and pertinent one, which is of pecuniary interest to the live-stock grower and the consumer in the city.

In planting apple-trees for profit in the Southwest it is well to follow the practice of the leading orchardists and plant only the Ben Davis, Gano, Jonathan, Grimes' Golden and Paine's Keeper.

It is now agreed that twenty-eight to thirty degrees is the proper temperature for the safe storage of eggs; also that no turning is required, as is the case when a temperature of twenty-five degrees is maintained.

It is estimated that each ton of cotton-seed contains one hundred and sixty-five pounds of ammonia, fifty-five pounds of phosphoric acid and thirty-six pounds of potash. Cotton-seed meal is therefore an excellent fertilizer.

When pruning the old orchard to promote a vigorous growth of new wood, the wounds made by the saw should be smoothed with a sharp knife, and be given a coat of gum shellac or one of light colored paint. This should be done before the sap rises.

A three-hundred-acre corn-grower in Illinois shreds his entire crop, at a cost of one dollar an acre, which he values at four dollars as compared with the current price of eight dollars a ton for timothy hay. The yield of shredded fodder is estimated at three tons an acre.

The "Iron Trade Review" estimates the average life of a seventy-five-cent wooden railway-tie at eight years. As twenty-eight hundred ties are required to the mile, it is easy to infer that steel ties, which are estimated to last twenty-five years, will very likely be substituted for those of wood.

A good way to plant a strawberry-bed in the kitchen-garden would be to make three rows side by side, twenty inches apart, leaving a four-foot space between the beds. This would obviate walking on the bed, and also prevent the picker from getting so wet when picking berries very early in the morning or soon after a rain.

The best manure for clover on moderately thin soils is one hundred pounds of nitrate of soda, two hundred pounds of superphosphate and two hundred pounds of kainite. Where the soil is rich in humus (vegetable-mold), fifty pounds of nitrate of soda, four hundred pounds of kainite and three hundred pounds of basic slag (Thomas phosphate) applied in the fall will produce excellent results.

Some of the old ways of farming are as good as the new. The old methods tended to conserve and increase the humus content of the soil. Later the fertilizer craze set in, and little attention was paid to preventing the exhaustion of the humus in the soil, which has resulted in the decrease of the average yield of the grain and oil-seed crops. Now, after fifty years of an exhaustive system of stimulated culture, there has come an urgent appeal from scientific sources for farmers to use every possible means to increase humus in the soil by growing and turning under the nitrogen-gathering crops, and to make a more judicious use of commercial fertilizers by using a less quantity of them in connection with a greatly increased amount of barn-yard manure.

Dr. George T. Moore

Dr. George T. Moore, formerly instructor in botany in Dartmouth College, now of the Department of Agriculture of the United States, has discovered a process for the production of bacterial cultures employed in inoculating soils for the successful cultivation of clovers of all kinds, alfalfa, soy-beans, cow-peas, and many other similar members of the legume family. The patent was issued and dedicated to the people of the United States on April 7, 1904. It is given to the people of the United States forever, the object being in effect to forestall any effort to patent such a process, and by that means circumscribe the efforts of farmers to improve their soils by raising leguminous crops.—The Dartmouth.

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## Summer Reading

There goes a notion among some very amiable but narrow-read people that the summer reading must be froth. Like many of their notions, it emanated from the land of shallow. While one would not expect the ordinary reader to find delight in Kant's "Critique of Pure Reason" or Spencer's "Sociology" during the hot days of July, there is likewise no foundation save that of custom for reading the trashy stuff that masquerades under the name of literature. What reader of exquisite literary taste could find pleasure in the average short story of the daily press? Who would sit in the servants' hall when Ganymede invited to a feast with the gods? Yet people who boast of being "great readers" daily get no nearer the feast than the servants' quarters. They mistake the rustle of the straw for softest down, and the tinkle of bells for God-given music.

Yet they are not so blameworthy as at first appears. People do not select their reading any more than they select their friends. They are born to a certain community, and in it or its prototype they spend their days, forming their friendships among those whom Fate—either kind or unkind, as circumstances direct—has placed in the same neighborhood. Whether we wish it or not, we are bound to recognize these geographical limits as stubborn facts; and it is the kind of books that are read by the stratum in which we move that largely determines our reading. The moment we go above or below it we enter a new stratum. Let one of those

"Omnivorous swallows

Who bolt every book that comes out of the press

Without the least question of larger or less—

Whose stomachs are strong at expense of their head,"

place their stamp of approval upon some mediocre work, and all his friends and acquaintances rush pell-mell to read it. So, I say, we do not choose—we accept. I would have you choose.

The field is broad and inviting—whether it be fiction, poetry, art, science, philosophy, biography, there are flowers that may be had for the plucking, and their cost is so little as to make one wonder. Books that brains have toiled and hearts have ached to produce, the modern bookseller will give you in exchange for ten to fifty cents of the coin of the realm, the price depending on the binding and type, not the inherent worth. And what a majestic assemblage! In fiction, Eliot, Hugo, Thackeray, Scott, Hawthorne. In essay, Emerson (the modern Plato), Thoreau, Lamb, Ruskin, Montaigne. In history, science and biography an equally imposing company. You know their names as well as those of your own circle of friends. Do you know their thoughts? Do you know what distinguishes them from the great army of toilers, and gives them a seat with the mighty? If you do not, then no more boast of your knowledge, but go in and sit down humbly, and inquire of them and scores of others whose names spring to your lips, and ask them the message God has sent through them. It may be difficult at first to acquire the manners that will admit you to this august crowd, but remember,

"Not a truth to art or science has been given,

But heads have ached for it,  
And souls have toiled and striven."

"Can ye not watch one hour?"

Like other benefactions, they come in troops, not singly, and the lover of the best in literature finds himself expanding and reaching out to a myriad of avenues of happiness. There are no limits save those he himself sets—the bounds of capacity. And he will question himself, after a year's devotion to the best thought, how he could have fed on husks when the treasure-house of the ages stood open day and night. It may require some effort to open up new valleys in the gray matter, but it is worth while. It is not necessary to read dry, uninteresting books. There are pleasant paths to every field. After you have entered you may find the pleasure of pushing through briars and brambles to the acanthus and lotus beyond.

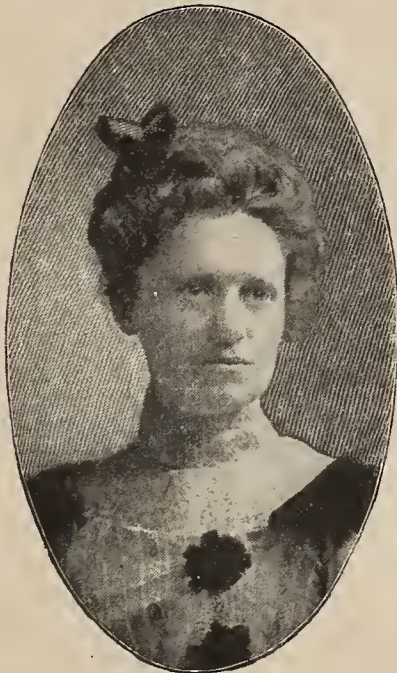
Mrs. J. W. Bates

Mrs. Bates quite won the hearts of Ohio people at State Farmers' Institute. She spent two weeks in institute-work in Wisconsin, and they loved her there. Her frank earnestness, cheery, happy, hopeful disposition, charm of manner that springs from a heart brimming with

## The Grange

By MRS. MARY E. LEE

love for humanity, her disciplined mind, all unite to make a gracious presence. She is entirely free from the mannerisms of some public women, who constantly proclaim by their bearing, "I am brighter than thou. I have a mission. Stand aside!" Her childhood was spent on a farm eight miles north of Indianapolis. There she developed a taste for the best literature, guided by the judgment of her father, to whom she lovingly refers as "teacher, brother, playmate." In 1890 she graduated from the high school at the age of eighteen, and the same year was married to Dr. J. W. Bates. Doctor Bates is in thorough sympathy with the aspirations of his talented wife, and they



MRS. BATES

have worked in unison. A few years later she took a special course at Purdue University, studying dairying and domestic science. She has been employed on the state institute force for several years, and is one of the best lecturers. She has also been employed in other states, and contributes to local and agricultural press. She believes that agriculture is yet in its infancy, and that the promoters of scientific agriculture are true missionaries. She also finds time for church-work, and is superintendent of a mission Sunday-school. She so impressed her energy and zeal on the little ones that they brought thirty-three dollars and fifty cents, mostly in pennies, and poured them into her lap as an Easter thank-offering. I doubt not the stories of self-sacrifice poured into her ears gave her as sincere delight as the money.

One needs only to look at the determined chin and the firm lips to know she has an indomitable will. But tender brown eyes surmount them, and tell of sweetness and charity, as well as determination. Her two daughters believe their mother to be the wisest and best woman in the world.

What so strong and purposeful a life means to agriculture is hard to estimate. "She has felt her own call to cast aside all evil customs, timidities and limitations, and to be in her place a free and helpful woman, a reformer, a benefactor; not content to slip along through the world like a footman or spy, escaping by her nimbleness and apologies as many knocks as she can, but a brave and upright woman, who must find or cut a straight road to everything excellent on the earth, and not only go honorably herself, but make it easier for all who follow her to go in honor and with benefit."

## Grange Topics

When I first began work in this department a young man volunteered to give me advice, which I gratefully received, but assiduously declined to follow. Among the valuable observations was this: "You will soon get around on all the grange subjects, so you had better get a few of us to send you notes. We will not charge you much." To which I replied, "As I understand it, there are but two subjects that cannot be discussed in the grange: Political, which embraces but a few topics, and sectarian. The world has been in existence about thirty-three million years, according to scientists. Recorded history runs back a few thousand. In that time events have run themselves; heroes have rushed into action; men and women have lived, struggled and passed into oblivion; truths have thundered at the doors of nations until they were given admittance; a pretty good sort of civilization has

managed to extricate itself from apparent chaos. If the grange in its discussions could arrive at the one-millionth part of all the history that combined to produce

one epoch in history, it would keep it busy three hundred and sixty-five days in the year. Every subject possible to be conceived has interest for some member. What is needed is to bring that topic to mind, and show where literature dealing with it can be found. It is not the scarcity of topics of interest to Patrons that conditions discussions, but the lack of definite knowledge of just where to seek for information thereon. Daily matters of great interest to the individual occur to the mind, but because of inadequate help thereon is regrettably dismissed. After a time even the interest grows dull from being so often disappointed. It is the mission of the grange to foster the spirit of inquiry, and be ready to point out helpful books thereon. Instead of grange topics being circumscribed, they are as broad as the heavens and as extensive as time." One of the missions of the grange is to put the members in touch with precisely the literature desired.

## Mosquitoes and Reincarnation

The Buddhists religiously supply each grave with a bowl of water to quench the thirst of the departed. Naturally, swarms of mosquitoes, which are supposed to be the reincarnated souls of the deceased, abound. Mr. Lafcadio Hearn voices the sentiments of many of us when he says, "I want to have my chance of being reborn in some bamboo cup or 'mizutamé,' whence I might issue, softly singing my thin and pungent song, to bite some people I know." Possibly this notion accounts for the neglect to follow Doctor Howard's advice about oiling the waters. We had called it apathy and indifference, but it may be simply the conservation of future joy.

## Mutual Fire Insurance

The farmers have added cause for gratitude that the various grange insurance companies have proved their stability and worth, since the old-line companies are growing more strict in their regulations, and show a tendency to advance the cost of insurance. The Baltimore fire was a heavy drain on insurance treasuries, and the lines are being drawn tighter. In the meantime towns and small cities are organizing insurance societies, preferring to carry their own risks rather than pay the exorbitant rates charged. The Grange Mutual is for the protection of farmers, not high salaries for officials.

## Hot-Weather Vicissitudes

Hot weather is the liver complaint of newly organized granges. "If I can get my converts through dog-days and fly-time," said a wise old parson, "I will have no fear for their future." So, if the granges can possess themselves in patience until Sirius has declined, they will find the cool autumn days bringing to them their pristine vigor. After all, Sirius is about four hundred and twenty-three billions of miles from the earth, and his effect cannot be very serious, notwithstanding superstition to the contrary.

## The Observatory

Let your light shine. Make your grange such a factor in a community that it will be considered as much an integral part of a community as the church or school. Be something by doing something.

Open and close the grange at the appointed hours. Observe parliamentary laws. Shut off the prosy, long-winded talker. Be firm, yet courteous. These are precepts that will aid a master in discharging his duties.

"Only on Nature's lap can some men weep,

Only to her beloved gives she sleep;

Her sympathy alone hath ever perfect touch,

Man gives too little, or he gives too much."

Multiply the avenues of enjoyment. Cultivate the nature God has given you, until all things will minister to you. In times of deepest despondency, when ties are broken by death or absence, you will find them all too little to give you comfort. He is a wise man who provides for the inevitable day.

## Put It in Your Pocket

The next time you go where you are likely to see some of your neighbors, just stick a copy of FARM AND FIRESIDE in your pocket, and when you get a chance show it to your neighbor, and get him to try it for a year at twenty-five cents. That's the way to do FARM AND FIRESIDE a good turn. Be neighborly.

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## FIRST PRIZE, \$10.00

Edith Goshert, Warsaw, Indiana

**M**R. NOAH RABY, who lived one hundred and thirty-two years, had a very eventful life.

When he first opened his eyes to this world, New Jersey was a royal colony, and when other colonies were struggling for independence, which did not come until 1776, he was quite a small boy.

Many historical events of importance transpired during his boyhood.

The first Continental Congress, which convened because the people of the colonies were being taxed unjustly by the English king, met in 1774. In the year in which Mr. Raby was born, 1772, an act was passed by the English king requiring that the salaries of the governor and the judges of Massachusetts be paid out of the colonial revenues without the consent of the Assembly. The next year came the famous "Boston Tea Party."

Mr. Raby passed through many wars during his lifetime, the first being the War of the Revolution, after which our independence was declared and we became a free people. Four other wars which he lived to see were the Mexican War, the War of 1812, the Civil War and the Spanish-American War.

Mr. Raby saw the first President elected, who was George Washington.

He saw the Presidents after the first one elected, up to Mr. Roosevelt, the last one.

Three of the Presidents who were elected during Mr. Raby's time were assassinated—Lincoln, Garfield and McKinley.

A great deal has transpired during this time in the making of our country—from a country inhabited by Indians and wild beasts, to what it is now; from vast territories unknown and unexplored, to the beautiful lands we hold to-day as our beloved America.

It is wonderful to know that one man has lived to see it all—from its rough wilderness, to its present beauty, culture and wealth.

Note all the improvements as they come, from the traveling conveyance, the "stage-coach," to the electric-cars, the steam-cars, and the great ocean-steamers that ply the great waters; the wagon with its team of oxen, to the fine horses, carriages and automobiles of to-day, the many new inventions by which labor is made easy, from the hand-sickle and the reaper, to the self-binder.

The cotton-gin was an invention of great utility, invented by Eli Whitney in 1793, when Mr. Raby was about twenty-one (just "his own man").

Very soon after the cotton-gin came the steam-car and steamboat, 1805-07—another interesting time in the life of this man, no doubt.

They were building railroads and canals in the years 1828-9. The first large railroad, the Pacific, was built in 1869.

The building of the telegraph was something wonderful. The first message which went flying over the wires was, "What hath God wrought."

Medicine, too; men were studying how to improve it. Doctor Morton discovered the use of ether.

Sewing-machines were invented, doing away with the laborious way of sewing by hand. This was in 1846.

Another invention which connected us with the Old World was the cable—1854.

The bicycle was introduced into our country in 1868, but this gentleman, Mr. Raby, was then too old to learn to ride, probably ninety-six years old.

Then came the electric-lights and the Bell telephone.

Electricity began to be used to run light machinery and street-cars in 1889, and it is now a very common mode of operating machinery.

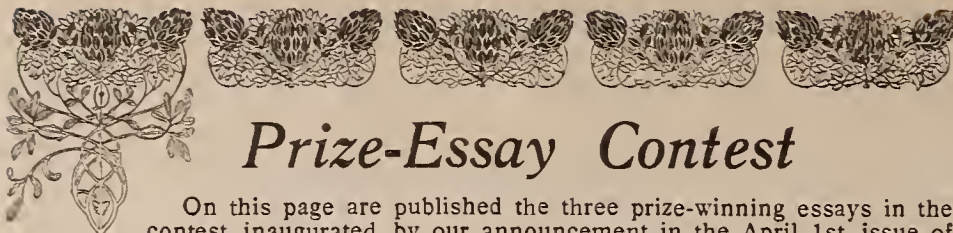
Steel war-ships were also made about this time.

The United States had several fine expositions during Mr. Raby's time, the first being the one held at Philadelphia, celebrating the Declaration of Independence one hundred years before—1876. The next one was held at New Orleans in 1884, celebrating the first cotton exported from America one hundred years before. The Chicago exposition was called the "Columbian" because Columbus came over to America in 1492—four hundred years before. It was held in 1893. The great Pan-American was held in Buffalo in 1901, and President McKinley was shot when at the exposition. They were just getting ready to have an exposition at St. Louis when Mr. Raby died—1904.

Education has advanced wonderfully during this man's lifetime. Presumably in his younger days there were many who could not read, but in his later days one could hardly find any such.

Schools and churches are built all over our country, and are held very dear by the people.

Music, too, has a place in almost every home. Organs, pianos, mandolins, guitars, violins, and a great many other in-



## Prize-Essay Contest

On this page are published the three prize-winning essays in the contest inaugurated by our announcement in the April 1st issue of FARM AND FIRESIDE. Noah Raby, aged one hundred and thirty-two years, died March 1, 1904. A prize of \$10.00 was offered to the boy or girl under eighteen sending the best essay on United States history during his lifetime. Prizes of \$5.00 each were also offered for the second and third best essays. Some errors will be found in the papers, which are published without correction.

struments of music, have their places in the country, as well as in the city, homes.

The first newspaper published was the "New York Daily Sun," in 1833.

A wonderful life Mr. Raby's surely has been. As a little boy he studied by the tallow dip or lard-lamp, but now we have gas, electricity and kerosene.

The United States has progressed in every way from Mr. Raby's earlier life to his old age.

## SECOND PRIZE, \$5.00

Floyd Dewhirst, Passport, Illinois

One hundred and thirty-two years ago the United States consisted of thirteen colonies, extending along the Atlantic Coast from Maine to Georgia. These colonies were the property of England. In but little over a century they have grown from a few dependent colonies to a great and powerful republic. Though the nation has been formed in so short a time, many important events have happened.

April 19, 1775, the first battle of the War for Independence was fought at Lexington. Afterward came Bunker Hill, and on July 4, 1776, the Declaration of Independence was signed. At Trenton, Princeton, Brandywine, Germantown, Saratoga and Monmouth important battles were fought. October 19, 1781, Lord Cornwallis surrendered at Yorktown, and the united colonies were free from the rule of Great Britain.

The constitution of the United States was adopted in 1787, and the Father of His Country, as Washington was proudly called, was elected as the first President. Washington died at the close of the last year of the eighteenth century.

In the year 1803 Jefferson, the third President, bought from France the Louisiana Territory, and later sent out an exploring party, which discovered the Oregon country, as it was then called.

In 1812 war was declared against England, who had been harassing our commerce. Though our navy was small, this war made the power of the United States respected by the nations of the world.

In the year 1821 Florida was bought from Spain, and in 1845 Texas, which had gained its independence from Mexico, was annexed to the United States. A dispute over the boundary led to a war with Mexico. The United States was victorious, and Mexico gave up a large territory. In return the United States paid her fifteen million dollars.

Gold was discovered in California in 1848, and caused many people to immigrate to the Pacific Coast. This was the cause of the rapid growth of California.

The North and South had long been disputing over the slavery question, and in 1861 the South seceded. The strife that followed was long and bloody. At Bull Run, Antietam, Chattanooga, Vicksburg and around Richmond bloody contests took place. In 1863 the battle of Gettysburg was fought, and from that time the Confederacy began to wane. April 9, 1865, Lee surrendered to Grant at Appomattox, and the cause of slavery was dead.

While the country was rejoicing over peace, Lincoln was assassinated by a fanatic actor named Booth, and so the nation lost one of her greatest Presidents.

Two years later the United States bought Alaska from Russia. Many people thought it a useless possession, but many times its cost has been obtained there in furs and gold.

At Chicago a great fire broke out October 8, 1871, which destroyed two hundred million dollars' worth of property and left thousands of people homeless. The same autumn fifteen hundred people perished in forest-fires in Wisconsin. The next year a great fire destroyed a large section of Boston.

July 2, 1881, James A. Garfield, the twentieth President, was shot at the railroad-station in Washington, D. C., by a disappointed office-seeker named Charles Guiteau, but lived over two months before death came.

In 1886 an earthquake destroyed several lives and many buildings in Charleston, S. C., and the surrounding country. Three years later a dam broke above Johnstown, Pa., causing the loss of twenty-three hundred lives and ten million dollars' worth of property.

Four hundred years from the discovery of America a world's fair was held at Chicago, Ill. Another world's fair was

to have been held one hundred years from the purchase of the Louisiana Territory, but the preparations could not be completed until the present year.

In 1898 Cuba was in rebellion against Spain, and on the night of February 15th the "Maine," which had been sent to Havana to protect Americans, was blown up by Spaniards. This was one cause of the war with Spain. She was defeated, and relinquished her claim on Cuba, Porto Rico and the Philippine Islands. The United States paid her twenty million dollars, and retained Porto Rico and the Philippines, but Cuba is now an independent republic.

A few months after the destruction of the "Maine" the Hawaiian Islands were annexed to the United States.

September 6, 1901, President McKinley, while at the Buffalo Exposition, was shot by Czolgosz, an anarchist, with whom he had started to shake hands. He died eight days later, and a third time was the nation called to mourn for a martyred President.

In September of 1900 a storm swept over Galveston, Texas, causing the water of the gulf to flood the city. Eight thousand people lost their lives, and many more their homes.

The United States has made as great progress in peace as in war. Americans have invented the greater part of labor-saving machinery now in use. Fulton invented the steamboat, Clinton dug the Erie Canal, and railroads were built. Whitney invented the cotton-gin, and thus made cotton-raising profitable. McCormick invented the harvester, without which the grain-fields of the West would be impossible. Morse invented the telegraph, Howe the sewing-machine, and Goodrich perfected the manufacture of india-rubber. Field laid the first submarine cable, and Edison invented the phonograph. There are a number of other important inventions—the telephone, friction matches, the perfecting of the printing-press and the discovery of anesthesia.

The twentieth century is one of great opportunities. Ought we not, with the past as an object-lesson, accomplish even greater things in the future?

## THIRD PRIZE, \$5.00

Lois R. Campbell, Ireton, Iowa

The first important event that occurred during the period of years 1772-1904 was the war in which our country struggled for its independence. This war began in 1775, and ended in 1783. The first engagement was the Battle of Lexington, which was fought on April 19, 1775. In 1777 Burgoyne surrendered his large army to the Americans. This was the turning-point of the war, as nearly all the battles after this ended in victory for the Americans. In 1781 Cornwallis surrendered his army to Washington, ending the war, the treaty of peace being signed at Paris in 1783.

One other important event happened in the year 1781, when the Articles of Confederation went into effect. These soon proved unsatisfactory, however, and steps were taken toward forming a Constitution. The Constitution was adopted in 1789, and in the same year our first President, George Washington, was inaugurated. Under his wise management our government was established on a firm basis.

In 1803, during Thomas Jefferson's administration, our country purchased Louisiana from France for the sum of fifteen million dollars. This proved to be a very wise investment.

In 1807 one of the most important events of our country's history was the invention of the steamboat by Robert Fulton. Its first trip was from New York to Albany on the Hudson River.

Our second war with Great Britain was fought in the years 1812-14, during the administration of James Madison. The cause of this war was "Impressment of American sailors." The Americans were victorious.

The Missouri Compromise of 1820 was made as a settlement of a dispute between the free and the slave states as to whether Missouri should come into the Union as a free or a slave state.

James Monroe's administration began in 1817, ending in 1825. In 1823 he issued his famous Monroe Doctrine. His administration was called the "era of good feeling," the whole country being in a state of prosperity.

Next came the war with Mexico. Its cause was a dispute over the boundary line of Texas. The Americans were the victors, having won every engagement.

In 1848 gold was discovered in California, and a great many people flocked to the West to search for gold. The rapidly growing West brought on more disputes between the slave and the free states. They tried to settle them by the compromise of 1850, but they could not. The Kansas-Nebraska Bill and the Dred Scott decision were some of the results of these disputes. Things were brought to a crisis by the secession of the Southern states. Abraham Lincoln was President at this time. He said the states could not secede, and that he would bring them back by force of arms, and so the Civil War was brought on. It began April 14, 1861, by the firing on Fort Sumter. One important event happened in 1862, when McClellan and Lee stood face to face on the banks of the river Antietam. "Lincoln 'vowed to God' that if Lee were defeated he would issue the Emancipation Proclamation, and free all the slaves." Lee was defeated, and on September 22, 1862, the proclamation was issued, declaring the slaves to be free. Another event was the great three days' battle at Gettysburg, July 1-3, 1863. This battle was a dreadful one, for nearly one third of the men engaged were killed or wounded. From this time on the Confederacy gradually weakened, and Lee's surrender to Grant on April 9, 1865, ended the war.

On the fifth night after the surrender of Lee, Lincoln went to Ford's Theater, and was sitting quietly in his box, when an actor named John Wilkes Booth shot him in the head, making wounds from which the President died early the next morning.

Johnson assumed the duties of President after Lincoln's death, but he was unsuccessful in his presidential term. We can scarcely blame him, however, for his failure when the most gigantic task that lay before any President lay before him—that of reconstructing the Union. At one time during his administration Johnson made abusive speeches about Congress. He was impeached, but there lacked one vote of the Senate to convict him, so he was acquitted.

In 1862 Congress began the building of a railroad which was to join California with the other states. One company began at Sacramento and built eastward, the other began at Omaha and built westward until the two met. They named this the Union Pacific Railroad.

After several unsuccessful attempts, an Atlantic cable was completed during Johnson's administration, which joined the Old World with the New by almost instant communication.

In 1876 a centennial exposition was held in Philadelphia to commemorate the one hundredth anniversary of our country's independence. It surpassed in grandeur anything that had previously been held in the New World.

On March 4, 1881, Garfield took the oath of office as President, but his term was of short duration, for on July 2d of the same year a disappointed office-seeker came up behind him at a railway-station, and shot him in the back. A long and lingering illness followed, from which he died September 19, 1881.

In 1893 the great world's fair was held at Chicago. Like the centennial at Philadelphia, it surpassed anything that had yet been held, and was much grander.

In McKinley's administration the most important event was the war with Spain, which was declared in 1898. Spain was owner of Cuba, and was ruling her so unjustly that the Americans were helping her by way of food and clothing, when the United States battleship "Maine" was blown up by Spaniards in Havana harbor, and two hundred and sixty of her sailors killed. Then war was declared, and again our brave soldiers were victorious, winning every battle.

In the year 1901, while McKinley was attending the Buffalo Exposition, he was in the Temple of Music shaking hands with crowds of people who wanted to shake hands with the President, when a man named Leon Czolgosz shot him. The President suffered a little over a week, and died September 14, 1901. Vice-President Roosevelt took the oath of office and became President a few hours after McKinley's death.

The attention of our country is now drawn to the great exposition which is being held at St. Louis this year. It promises to be as much greater than the Chicago World's Fair as that fair was greater than the Centennial Exposition at Philadelphia.

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We spend thousands of dollars to buy articles and illustrations for FARM AND FIRESIDE, not considering the cost of printing, and sell it all to you for twenty-five cents—the price of a year's subscription. We don't know where you can buy so much for so little money. Did you ever stop to think about it in that way? It pays to think sometimes.



## Some Facts About Our Navy

THE vessels in the United States navy that are fit for service number two hundred and fifty-four, of which eleven are first-class battle-ships and fifteen are protected cruisers. Forty-three vessels are under construction, of which thirteen are first-class battle-ships, eight are armored cruisers, and eight are protected cruisers. The great nations of the world rank as follows in war-ship strength: Great Britain, France, Russia, Germany, United States, Italy, Japan and Austria. When the building now going on is completed the nations will rank in the following order, with tonnage stated: Great Britain, 1,867,250 tons; France, 755,750; United States, 616,275; Russia, 558,492; Germany, 505,619; Italy, 329,000; Japan, 253,000; Austria, 149,000. In other words, the United States will pass both Russia and Germany, and stand third instead of fifth. Great Britain contemplates the addition of 351,000 tons to her war-ship tonnage, France 179,000, United States 315,000, Russia 142,000, Germany 118,000, and the other nations much smaller amounts.

The tendency in this country is toward the construction of battle-ships of the heaviest sort. There is not in existence on the waters of the globe to-day a ship of sixteen thousand tons displacement, and yet we are building three of them, and are about to authorize a fourth. The naval officers are already talking of putting the "Oregon" on the retired class for coast-defense. This is suggested on account of its interior construction as not affording room for state-rooms and all the comforts of later-built large ships.

Senator Hale is the chairman of the committee on naval affairs, and is a conservative and well-informed man. He is inclined to deprecate the construction of ships of such enormous size, and advocates the authorization of but one new battle-ship this year, while last year five were authorized; and he feels that it would be well to await the results of the war in the Far East before going on with our naval program on an extensive scale. We may learn something of very great value if we wait.

We are building all our battle-ships with revolving turrets. Very much to his surprise, Senator Hale has discovered that no other nation is doing this. England, the great naval power of the world, and supposed to be the leader in the construction of war-vessels—she is building nine battle-ships now—mounts all the guns "en barbette"—a platform outside upon which the guns are imposed. The Senator said:

"I followed this thing up to see why it was that while we are going on, asking no questions, and building nothing but revolving turrets for these guns, England is not building one of them. The reason is that they are afraid of them. They say they are subject to an ordinary accident: that if a revolving turret jams from any cause—the listing of the ship, or a single shell hits it—the ship is good for nothing; the big guns cannot be used. They say if an explosion were to take place in a turret—and anybody who has ever been in them can understand that—the results would be horrible. And so it is the fact that the great power of Great Britain, which is the great accredited authority on naval structures, is not building a single revolving turret for large guns. We are building all. It is not the Secretary of the Navy who decides these matters; it is the board of naval officers. Of course, they may be right; but if we are all right, Great Britain is all wrong."

Senator Proctor, who served as Secretary of War under President Harrison, informed the Senate that there is a parallel case in the army—the disappearing carriage, in the use of which we depart from the policy of all other countries. He added: "The reason is very much stronger in the case of the army, because the barquette gun, being on an elevation, a fort, is very much more protected than it would be on board ship. We have spent many millions for mounting guns in forts, some of them at an elevation of two or three hundred feet, on disappearing carriages, which a single shot might disable, and in my opinion it would be very likely to. Even a shot throwing gravel or the debris of the concrete from the fortifications would put the gun out of service."

While the country is willing and desirous of seeing a navy powerful enough to protect all our interests and maintain our prestige, it is not ambitious to emulate England, which openly and boldly says that no matter what it costs she will have a larger navy than any other two powers.—World's Events.

## Corn in Indian Ceremonies

In all Indian rites and ceremonies corn plays a most important part. Among the Iroquois the annual "green-corn dance" is the great social event of the year, while with the Moqui, or Hopis ("good people," as they themselves pre-



## Around the Fireside

fer to be called), betrothals, marriages, christenings and burials, besides the snake and various Kachina dances, find symbolism and expression in the pink, purple-black, yellow or white corn used in their celebration.

When a baby is twenty days old, the mother, taking it in her arms at sunrise, goes to the very edge of the cliff village, looks off over the desert, breathes a prayer, then putting an ear of corn in the child's hand, sprinkles its head with meal, throws a handful of meal three times toward the rising sun, and says, "Now, White Wings, I baptize thee."

As the child gets to be five or six years old, and therefore eligible for membership in one of the secret fraternities of the tribe, she is taken into the underground Kiva for the initiation ceremony. Here she is furnished with an ear of white corn called "ingnu" (my mother), then sprinkled with meal and water by all the men and women of the order, who shout wildly, then rush out to deposit their prayer-offerings. These consist of corn-cobs into which eagle-feathers are stuck.

Still later she joins the "Lala Konti," or women's secret society, and dressed in a beautiful red-bordered white blanket, with all the jewelry she possesses or can borrow, takes part in the graceful public performance of the basket-dance. Led by the priest, who carries a basket of "hoddentin," or sacred meal, in his hands, the "lakone mana," or maidens, also bearing brilliantly colored, plaque-like baskets, advance into the dance-plaza. Here the priest draws certain figures on the ground with the meal, while the maidens draw up in line, throw the corn-cob prayer-sticks upon the meal figures, to be picked up by the priest, placed in a row on the meal pattern, then finally returned to the dancers who threw them.

When a maiden is betrothed, the announcement is made with corn, while the marriage ceremony, which extends over several days, is opened by the bride going to the house of the groom's parents and kneeling at the family meal-trough, beginning to grind white corn between the stones. This she keeps up without speaking until the last day, when purple corn is used in lieu of the white.

When death comes, and "White Wings," wrapped in her bridal blanket, is to be laid away in the crevices of the rock, with her face to the east, a roll of "pike," made from the purple corn, and a bottle of water are placed by her side for "spirit-food." On the rock just over her head a stick is set up, and leading from this toward the West a trail of corn is sprinkled, to supply White Wings' wants as she journeys to the happy hunting-ground, beyond the white-capped San Francisco mountains.—Emma Pad-dock, Telford, in the Pilgrim.

## A Roosevelt War-Story

Jacob A. Riis in his "Theodore Roosevelt the Citizen," in the "Outlook," tells this anecdote of Colonel Roosevelt's war experience:

"He had a man in his regiment, a child of the frontier, in whom dwelt the soul of a soldier—in war, not in peace. By no process of reasoning or discipline could he be persuaded to obey the camp regulations while the regiment lay at San Antonio, and at last he was court-martialed, sentenced to six months' imprisonment, for there was no jail to put him in. The prison was another Rough Rider following him around with a rifle to keep him in bounds. Then came the call to Cuba, and the colonel planned to leave him behind as useless baggage. When the man heard of it, his soul was stirred to its depths. He came, and pleaded as a child to be taken along. He would always be good; never again could he show up in Kansas if the regiment went to the war without him. At sight of his real agony Mr. Roosevelt's heart relented.

"All right," he said. "You deserve to be shot as much as anybody. You shall go." And he went, flowing over with gratitude, to prove himself in the field as good a man as his prison of yore, who fought beside him.

"Then came the mustering-out. When the last man had been checked off and accounted for, the War Department official—quartermaster or general or something—fumbled with his papers.

"Where is the prisoner?" he asked.

"The prisoner?" exclaimed Colonel Roosevelt; "what prisoner?"

"Why, the man who got six months at a court-martial."

"Oh, he! He is all right. I remitted his sentence."

"The official looked the colonel over curiously.

"You remitted his sentence," he said. "Sentenced by a court-martial, approved by the commanding general, you remitted his sentence! Well, you've got nerve."

—Facts and Fiction.

## How Much Food to Eat

How shall one determine how much food to eat? Too much mystery has been thrown about this subject. Let your sensations decide. It must be kept in mind that the entire function of digestion and assimilation is carried on without conscious supervision or concurrence. Satiety is bad. It implies a sensation of fullness in the region of the stomach, and that means that too much food has been taken. The exact correspondence in a healthy animal between the appetite and the amount of food required is extraordinary. As a rule, the meal, unless eaten very slowly, should cease before the appetite is entirely satisfied, because a little time is required for the outlying organs and tissues to feel the effects of the food that has been ingested. If too little has been taken, it is easy enough to make it up at the next meal, and the appetite will be only the better and the food more grateful.

No one was ever sorry for having voluntarily eaten too little, while millions every day repent having eaten too much. It has been said that the great lesson homeopathy taught the world was this: That, whereas physicians had been in the habit of giving the patient the largest dose he could stand, they have been led to see that their purpose was better subserved by giving him the smallest dose that would produce the desired effect. And so it is with food. Instead of eating, as most people unfortunately do, as much as they can, they should eat the smallest amount that will keep them in good health.—The Century.

## Floral Hints

You need not be without flowers because your place is shady. Any of the following shrubs will give very good results in shady places: Berberis, cornus, clethra, deutzia (Gracilis), privet, azalea (Amoena). Among the low-growing plants for shady places are aquilegias, lily-of-the-valley, digitalis, funkia, hemerocallis, iris, primulas, myrtle, spirea and violets.

Do not uncover roses until the weather has settled; the tender sprouts are easily injured. It is well to partly uncover them, waiting another week or two before all the covering is removed.

As soon as roses are uncovered in the spring they should be cut back, removing at least two thirds of the old wood. The most satisfactory vine for covering wall is ampelopsis veitchii (Boston ivy). The leaves of this beautiful climber resemble in shape the English ivy, overlapping one another closely, changing in fall to the most vivid autumnal tints—gold, purple and scarlet. It clings to stone, wood or brick. No building is too handsome to cover with this plant, and the most unsightly building is made picturesque by it. It enhances the beauty of the most intricate architectural outlines.

The Japan honeysuckle is almost evergreen, and is the best vine grown for covering a trellis or forming a screen.

Stokesia cyanea is a native plant much neglected at home, but grown in considerable quantities in Europe for supplying the demand for blue flowers. It is a very desirable hardy plant, growing about eighteen inches high, bearing freely, from July to October, blue flowers four inches across.

Japanese iris produces gorgeous flowers resembling orchids. They come into flower after all other irises are done blooming.

Box trees make very useful plants for decorative purposes, either for indoor or lawn decoration. They will stand considerable frost without injury. They should be kept sheared in pyramidal form.

Achillea (The Pearl) is a very attractive plant for planting in cemeteries. The flowers are pure white, perfectly double and produced in large sprays. The plant is very dwarf and of spreading habit.

The Shasta daisy, of which a great deal has been written during the past year, is proving a great success. It was introduced by Burbank, of California, to whom we are indebted for so many fine introductions. Flowers are of the purest

glistening white, borne on long, stiff stems, and are much larger than any other daisy.

The primula (Veris superba) is one of the good new things. The plant resembles the tender varieties, the flowers appear in great clusters soon after the frost is out of the ground. The color is a bright yellow, and is a beautiful contrast to the dark green leaves. It is perfectly hardy.

For dry, rocky places, plant yucca. It will thrive where nothing else will grow.

Plant roses in the spring, especially the tender varieties; the hardy varieties may be planted either in the spring or fall.

Soak sweet-pea seed twenty-four hours before planting, and you will have blossoms earlier.

If you intend using castor-oil bean plants for a tropical effect to your canna or caladium bed, plant the seed early, in boxes or pots, transplanting them to the open ground when they are about ten or twelve inches high.—B. P. Wagner, in Men and Women.

## Diverting His Mind

A cloud settled down on the office when the senior partner came in. His hat was pulled down to his ears, and his brows drawn together in a black bridge over his eyes. The two stenographers quailed under his glance, and even the office-boy was shaken from his usual calm. The chief acknowledged the salutations of the head clerk with a grim nod, and then strode into the junior partner's room. His voice came through the partition in a confused growl.

"Going to be a chilly day with the boss, I guess," the office-boy said to the stenographer who had been with the firm for ten years.

"You should call him Mr. Barnett," she answered, reprovingly, and added a little lecture on the duty of respect to elders and employers. She was finishing her lecture as the senior partner emerged from the inner room. He comprehended her and the office-boy in a swift glance of disfavor.

"Miss Murdock," he said, icily, "if you're not too busy talking to William I should like to give you some dictation."

She rose with a deep flush on her cheeks, and went into the private office. He stopped a moment in the telephone-booth, and the office force could hear him berating "Central." He came out with heavier lines from his nose to the corners of his mouth, and his forehead was crumpled in a deeper frown.

In half an hour Miss Murdock came out. "I don't know what's the matter with him," she said to the second clerk, in an awe-struck voice. "He's just dreadfully cross this morning. He even made me spell difference with one f."

"He acts as if he thought we were just dirt," the new stenographer said. "I wish I'd stayed with that lumber company."

The fidelity of years flared up in Miss Murdock. "He's generally the kindest man I ever knew," she said.

The office-boy nodded. "That's right."

Within a few minutes Mr. Barnett refused to see three valued clients. At intervals of a few minutes he rushed from his room and shut himself into the telephone-booth. Each time he came out more cross and haggard.

By noon the office force had fallen into a state bordering on panic, and even the junior partner, Burke, kept out of range of his senior's sarcasm. When for the tenth time Mr. Barnett entered the telephone-booth, the astute William said, "I guess he'll fire us all when he comes out this time."

Mr. Barnett stayed a long time with the receiver held to his ear. He came out with beads of perspiration on his forehead and tears in his eyes. He looked around the room, and smiled tremulously. "She's come out of it beautifully, the doctor says. The anesthetic went off, and she waked like a baby. And he says the cut in her throat can be covered by a string of beads."

He beamed tenderly on them all. "What are you talking about?" his partner asked.

"Why, my little girl's at the hospital, and had an operation on her throat this morning, and the doctor's just telephoned that it's all right. He wouldn't let me stay at the hospital—said it was better to come down here and divert my mind by 'tending to business.'"

"Well, you've at least diverted our minds," Burke answered. "Why didn't you tell us so we'd understand?"

Mr. Barnett gave a shamefaced smile. "I just couldn't," he said, simply; "but now I want you all to take a vacation this afternoon. It's Wednesday, and you shall all have matinee tickets as my treat. And now I'm going to buy some beads for Annie."

When he had gone, the two stenographers wiped their eyes and nodded sympathetically. The older men cleared their throats, but William, the office-boy, looked about him belligerently.

"Didn't I always say he was all right?" he asked.—Youth's Companion.



## A Housekeeper's Motto

If I would serve, while others sit at ease,  
My heart and hand, my brain and tongue  
must please

To do their best;

Not only dainty viands must be brought,  
But kindly speech, that waits on kindly  
thought.

Must greet my guest!

—Boston Cooking School Magazine.

## Dainty Dishes for the Sick-Room

**I**N CASES of fever, after the fever has run its course, the cure depends almost entirely upon the food served the patient. Often a slight mistake proves fatal, and is always serious. What is true of fever is also true in other sickness, but not in the same degree. In fever cases solid food is prohibited, and so one has to fall back on eggs, milk, fruit and meat-stock.

**RICE SOUP.**—Take one pint of good beef or mutton stock, add one fourth of a cupful of well-washed rice, and let simmer until the rice is nice and tender. Beat the yolks of two eggs together, add one half cupful of new milk or cream, and stir into the soup. Season, and serve in a pretty cup.

**GRAHAM GRUEL.**—Put one pint of water in a double boiler, and when boiling stir in one tablespoonful of graham meal blended with a little water. Cook for one hour, and season with a pinch of salt. Put in a dainty cup with two tablespoonfuls of cream, and serve hot.

**GRAPE BLANC-MANGE.**—Take one half cupful of grape-juice which has been sweetened to taste. When boiling, stir in two scant teaspoonfuls of corn-starch blended with one tablespoonful of water. Let boil about five minutes, then pour into a pretty mold—a cup will do nicely. The mold should be rinsed in cold water. Turn out on a dainty saucer, and place whipped cream around it. Any kind of fruit-juice can be used instead of the grape-juice.

**TAPIOCA SOUP.**—Soak two ounces of tapioca in a little cold water; add this to one quart of good stock, and let simmer until it is soft and tender. Season with salt and a little pepper if liked.

**EGG SOUP.**—To one pint of stock stir in two well-beaten eggs to which one tablespoonful of cream has been added. Heat to the boiling-point, stirring constantly, so that the eggs will not curdle or get lumpy. Serve in a pretty cup with a few crackers.

**EGG ON TOAST.**—An uncooked egg is much more digestible than a cooked one, and a nice way to serve it is on toast. Cut a slice of stale bread very thin, and cut out a piece with a round cake-cutter; brown nicely on both sides, and dip in hot milk. Spread with the white of the egg beaten stiff, leaving in the center a place in which to slip the yolk whole. Sprinkle with salt, place in the oven a few minutes, and serve hot.

**EGG TEA.**—This is another good way to serve a raw egg. Beat the white to a stiff froth, and stir into it the yolk well beaten; season with a little sugar and a tiny pinch of salt. While stirring, pour very slowly into this one half cupful of hot milk. Grate a little nutmeg over the top, or sprinkle over a little cinnamon.

**LEMON WHEY.**—To one pint of milk add one tablespoonful of lemon-juice. When the whey separates, strain off, and serve as a drink. M. M. W.

## The Unofficial Member

"It really does not make any difference whether I go or not," said little Mrs. Dale, as she glanced uneasily at the clock. The hour-hand was already creeping away from three, and the meeting was announced for half-past. There was the usual weekly peck of socks and stockings to be darned, and across Mrs. Dale's lap lay Annie Lou's best white dress with a jagged tear which was going to call into requisition all of her skill to conceal it with a darn. These things lay right at her hand, and she could not see over the mountain of work which loomed up when she allowed herself to recount the various things she had planned to do. It did not seem like she could spare even one hour of that busy afternoon, and she then repeated to herself that it was not any use.

"I don't do any good at the missionary-meetings. I never open my mouth in the discussions, and if they were to call on me to lead in prayer, I know I should faint. Of course, I feel interested, and I like to hear the others talk, and read the pieces, but it does seem now that I had better stay here and try to get some of this mending off my hands."

She stitched away busily for a few moments, and then put it all aside in her own orderly manner. "It is horrid to be the slave of habit and to have a troublesome conscience. I know I shall not do any one a bit of good by going to the church, but I am so in the habit that I cannot feel easy not to go."

She was a little late, but the president smiled at her as she crept softly in, and sat down by a neighbor, who smiled, too, and then she soon forgot her undone

work in the proceedings of the society. After it was dismissed she lingered along with the others, chatting pleasantly, and when she went home she was a great deal brighter and felt her burden of care less heavily.

"After this," she said, as she lay down that night, "I will not try to fight off my inclination to go there, even if I am of no use to the society. It does me so much good." Then she sighed a little, and wished that she might help some one, too.

By and by the dream-angel came, and brought her a vision so sweet that although she realized all the while that it was only a dream, she wanted to hold on to the precious words as they came to her. She thought that she was sitting in the church, wishing like always that she could be helpful and clever like the official members, and that softly Mrs. Layton, the president, had murmured to her, as she sat down and clasped her hand, "My dear, I am glad you have come. The interest in your face is so sincere that it encourages and helps me more than I can tell you. Presidents of missionary societies do not have an easy time, and one of the most trying things is to prepare a talk or a presentation of facts, and then while you are delivering them see from the vacant looks of your hearers that their thoughts are far away. You have helped to keep me in heart many a time when I was at the point of resigning and not trying any more to keep this society alive."

Before the astonished listener could reply, Mrs. Layton had slipped away and another woman was beside her.

"You cannot know," said this one, "what your pleasant greeting and smile mean to me. It is an awful thing to be the treasurer of this society when half the time the members will declare they have paid their dues already when I ask for them, and then get mad with me when I show my books. You never do, and when I look at you I can see that there are no shadows in your kind eyes. Oh, you do not know how you help me."

Still another came. It was the long-suffering recording secretary, who said, "Of all the offices in the gift of this society, mine is the hardest. I never can enjoy anything, for I have to be so on-the-alert to make notes, lest I forget, and then I defy anybody to make the minutes of a society like ours interesting. Perfectly conscious of this at each meeting, I rise to read them, feeling in the atmosphere the very spirit of boredom; but I have learned to glance at you, and what I see in your face encourages me—it is in-



PANSY TRAY-CLOTH

terest, and love for all the humdrum routine details of our proceedings. I should be sorely tried if you were to fail to come."

Mrs. Dale in her dream then got up and started down the aisle, when another woman stopped her. She was a woman that Mrs. Dale had often gone out of her way to speak to.

"Oh," said she, "I am so glad that the time of laying hearts bare makes it possible for me to tell you what you are to me. Do you know that the circumstances of my life and environment shut me out from nearly all social intercourse, and that the coming to these meetings is the nearest approach to mingling with my kind that I can have? Well, I used to come, and go away hungry for a word, a smile; but one day you came to me and spoke so pleasantly, even without an introduction, and now I look for you, and am so disappointed if you are not here. Just your little greetings are something to remember and be glad over until meeting-time comes again."

Mrs. Dale felt quick tears springing into her eyes, and she was trying to get away, and enjoy her grateful, happy thoughts, when she heard some one saying behind her, "The burdens of the societies of our churches appear to rest entirely upon the executive ability and earnestness of the official members, but these officials are most dependent upon

the loyalty and coöperation of those women who make up the rank and file. Just as official enthusiasm reacts upon the membership, so does the constant attendance and attention of the members inspire hope of success and spur the officers on to renewed effort."

Mrs. Dale laughed softly to herself when she awoke, and repeated that she would never try to stay away again.

SUSIE BOUCHELLE WIGHT.

## How We Served the Wedding-Feast

The morning of the wedding dawned as perfect as if it had been made to order. The bride, dismissed from all labor in view of the trying ordeal of the wedding ceremony, strung the white ribbons in the laces of her marguerite.

The parlors awaited trimming. The flowers lay wet and sweet in banks on the floor. No less sweet in its own wholesome way was the kitchen. The cateress had come, and with her had come to us all a sense of rest and security. It was always safe to leave all culinary matters in her strong, capable hands. Spicy, crisp and crusty, the bride-cakes awaited their crowning touch—the icing. The angel-cakes were as white and fluffy as only angel-cakes know how to be. The cateress chopped chicken for the salad, when the thunder-bolt fell in the shape of a piece of yellow paper with a few dreadful words written on it. It was addressed to the cateress. She turned white—poor soul! "Read it," she gasped; "I can't."

I read, "Your mother ill. Come at once."

Of course, for a while it was of death and sorrow we thought, not of wedding cheer; but when the cateress had caught the train, and we had done all we possibly could for her, we came back into the kitchen, redolent of bride-cake, and looked at each other.

The wedding-feast was at five. The guests were only the relatives, but of them there were plenty. Most of them were strangers, but they were of the kind to appreciate fully faultless cookery and service. There was but the one cateress in town.

So far we went, and looked at each other. "We" consisted of four people. There was Mary, the good-natured German maid-of-all-work, excellent in everyday affairs, but absolutely useless under excitement, when, as she expressed it, she "lost" her head. There was the bride's sister, who was the sole hostess on this occasion, there was Cousin Lena, and there was me. Mary was good for the rolls, the hostess could make coffee which caused one to think of ambrosial nectar, Lena thought she could finish the salad, and I could spread sandwiches and manage the icing, maybe.

Now, the bride, who as yet was in blissful ignorance of the state of things below-stairs, was unusually gifted in both cooking and serving. Indeed, her hill-side home was celebrated for its charming lunches and delicious dinners. In view of these facts it was not difficult to imagine her utter surprise and dismay if her well-planned wedding-supper should consist simply and solely of the viands just named—rolls, coffee, sandwiches and salad, with cake for a separate course.

Who it was to think first of the scheme that saved the day, I don't know. Perhaps it evolved itself out of the general chaos of our plans, but this it was:

The bride was most popular among the young people. Great indeed had been the disappointment of her particular girlfriends when the smallness of her home and the number of the groom's immediate relatives had made it necessary to omit their names from the list of wedding-guests. Now, nearly all these young women were capable cooks in one line or another, and the one or two who couldn't cook could serve to perfection.

This is what we did: Some went in one direction, some in another. We brought Belle to concoct, with skilful fingers, her well-known salmon croquettes; Grace to make her famous fruit jelly, served with whipped cream; Lou to prepare the cheese-crackers and set the table, and Bertha to serve, and each of them to help freeze ice-cream and trim the parlors by turns.

Well, we did it. The ceremony passed off perfectly. Promptly at five the guests sat down at the table. The courses came and went. Everything was delicious. Each dish was deftly and daintily served—the pretty, exquisitely gowned waitresses adding not a little to the effect.

When it was all over, and the bride had departed in a shower of blessings and blossoms, I heard one of the groom's relatives remark to another, "Pretty idea, wasn't it, to have the bride's girl-friends give the wedding-supper?"

ALICE E. ALLEN.

## Some Outdoor Pillows

Since much of our leisure time in the hot days of summer is spent outdoors, it is desirable that we have everything, so far as possible, to contribute to our ease and comfort there. A veranda or lawn with an ample supply of pillows will give that general air of comfort we so much desire.

These outdoor pillows should be of various sizes. Large square pillows are suitable for rests for the back or for floor-pillows. The smaller square ones and the round and oblong ones are especially suited for chairs, seats and hammocks.

All outdoor pillows should be covered with material that is easily laundered. Gingham worked in silkolene are always nice. A red-and-white-checked gingham with a Turkey-red calico ruffle or a plain gingham one gives a touch of color to veranda-furnishings. Denims are always serviceable and pretty for outdoor pillows. They can be left plain or outlined in wash-cottons. Scrolls and other conventional designs are easily done. The brown shades of linen when worked with lighter or darker brown or yellow wash-silks make very attractive coverings for pillows. Upholstering-goods or grass-cloth furnishes the best kind of covering for foot-pillows, and there is nothing better for lawn-pillows than table oil-cloth in pretty designs, as dampness will not harm them and they are very easily cleaned. Pongee makes a dainty as well as a serviceable covering for these pillows, and is especially attractive if embroidered in washable silks. One much admired was made of pale green pongee and embroidered in white daisies. Japanese cotton goods and awning material are often used for outdoor pillows.

If one wishes a soft pillow, eider-down or feathers should be used for filling; if something firmer is desired, hair or excelsior should be used, and moss is also good. Balsam-leaves and pine needles make very cooling and agreeable filling for hammock-pillows. Some people use paper cut fine and curled for this purpose, but I would not advise this, unless the pillows are for temporary use, since the paper soon works into a hard mass.

The inside covering of all outdoor pillows should be something heavy, such as ticking or duck, or the filling may work through.

PANSY VIOLA VINER.

## A Pretty Summer Stock

For the foundation of this stock make a collar of linen, fine long cloth or dainty dimity. It may be plain, solidly tucked or tucked in spaces. From same material cut the tie. This should be of sufficient length to pass around the collar and fasten in front in the pretty four-in-hand style. When finished, the tie should be about two inches wide in the center, gradually widening toward the ends, which should be prettily pointed. Cut the tie in two in the center, and hem the sides and ends neatly. Fasten the two pieces of the tie—one to each side—to the collar where it closes in the back. Let the tie lie in tiny folds following the lower edge of the collar. About an inch from the front of the collar at each side fasten the tie again, then tie prettily. When the tie is to be laundered, untie and unfasten from the collar except at the back.

If the collar is tucked, the ends of the tie may be tucked. If plain, they may be edged with narrow lace. A pretty touch is added by setting in each end a tassel wheel or lace medallion. A dainty turnover finishes the collar.

If desired, this same idea may be used in making a stock of fine silk scrim. In this case make a turnover of scrim for the collar, and embroider in pale pink, blue or green. Repeat the same pattern across ends of tie.

A. E. A.

## Pansy Tray-Cloth

A serviceable and handsome tray-cloth may be made as follows: Take a piece of butchers' linen (common duck may be used instead), and cut it oblong in shape. Baste the pansies, which have been cut from cretonne, around one half inch from the edge. Buttonhole the edges of the pansies to the linen with long-and-short stitch. All colors of the pansy should be used. When finished, cut the linen from the outer edge, thus leaving the outer edge of the pansies to form the scallop. The white center, with its heavy border of purple pansies, makes a very neat and pretty tray-cloth.

O. M.

## To Renew Velvet

To renew velvet, cover the face of a flat-iron with a wet cloth; hold the wrong side of the velvet next to this cloth until thoroughly steamed, then brush the pile with a soft brush.—Woman's Magazine.



## Things Seen in City Shops

HERE are a few of the things that were noticed in a recent shopping-trip in town:

Shirt-waist suits bid fair to be the most popular and the most convenient of all the summer frocks. The woman who has one can be sure at all times of the day that she is handsomely and appropriately dressed.

These shirt-waist suits are made of everything, from calico to silk, and almost every woman can have one silk one, as the prices are so very reasonable. Silks of good design and quality can be had as low as fifty-nine cents a yard at special sales, and the clever girl can have a stunning frock at slight cost if she will use her brains as well as her fingers.

Have a white linen one for afternoon wear. One that I saw was made with a nine-gored skirt that flared below the knees. A stitched band of the linen covered each seam. The waist had a deep yoke of heavy lace, with bands of the linen coming down from the neck, over the lace, into the belt. The sleeves were rather close at top, flaring over a deep cuff, edged with the linen bands.

Another pretty frock was of light blue linen. This skirt, also, was nine-gored. A band of dark blue linen edged with white crossed the bottom of each gore, and continued up the seam to about the knees, where it ended in a point. The waist had bands of the dark blue to outline an 1830 yoke, and turning each side of the front, extended into the belt in "stole" style. The sleeves were the old-fashioned leg-o'-mutton.

A very "chic" silk suit was of dark blue with a tiny stripe of black, made with a plaited or kilted skirt, which is nothing more than a tuck at the edge of each gore, narrower at the top, with an inverted plait at the back. The waist was in the same style, all plaits turning from the center front, giving the shoulder a broad look. The only trimming was straps of the silk crossing the front closing. The straps were pointed at the ends, and had three small cut-steel buttons. There were two groups of three straps each. The sleeves were plaited, and were made with a deep cuff. A row of steel buttons outlined the outer seam.

I saw another of plebeian calico, and it, too, was very pretty, the design being a clear blue-and-white check, trimmed in bias bands of the goods edged with white, with a white belt and stock cross-stitched in blue cotton.

It is very evident that all women are interested in the linen frocks, as they are important features of the summer wardrobe.

Some of the other things which I noticed may be of interest to you. They are as follows:

The flat hip-yoke on dresses has entirely disappeared, but the shirred yoke is considered "good form."

Wherever you can put insertion you can put puffs, is a good rule to follow. Frequently they go together. Narrow rows of the puffing are alternated with rows of insertion, and entire yokes and hip-yokes are formed of them.

Eight out of every ten gowns made in accordance with the latest fashion show a touch of puffing or of shirring somewhere in their composition. The puffing is newer, and therefore in the lead.

A charming way to use shirring is in the form of a deep pointed yoke coming well down over the shoulders, and ending in a point just above the top of the corset in front.

All shades of green are fashionable. Bright green parasols will be carried with summer frocks.

The "louisine" ruches, of which you read so much, are nothing more than a bias band of silk frayed out on each edge, and gathered very full in the middle.

A new idea for fastening down plaits on the skirt and waist is a series of rather large-embroidered dots, in silk or mercerized cotton, according to the material on which they are applied. These dots take the place of stitching.

The newest madras curtains for summer use show an all-over latticework woven in wood-browns. Over this latticework trail climbing roses, with buds, blossoms, stems and foliage in natural coloring all woven in the goods. The thin white ground of the madras is almost invisible when suspended at a window, leaving only the roses and foliage visible.

You can get beautiful designs of dimity and lawns for twelve and one half cents a yard—such dainty old-fashioned designs. And they are the "newest" thing now. A small pink rosebud on a pure white ground is exquisite made with a deep circular ruffle on the skirt, this ruffle in turn covered with tiny narrow bias ruffles—one above the other if economy is not to be considered—and each of these edged with narrow Valenciennes lace. Have the waist, below a lace yoke, also covered with the narrow ruffles. The elbow-sleeves are made entirely of narrow ruffles. To wear this you must be young and slender.

CAROLINE CRAWFORD.

## The Housewife

## How to Make a Cross-Stitch Sampler

Those who are fortunate enough to possess a grandmother's or great-aunt's old-time sampler are very jubilant just now, because all manner of cross-stitch designs are so prominent in the fancy-work world. It seems that all the old-time fads and fancies gradually roll around into popularity again, so for the sake of our daughters and granddaughters it will be well for us to preserve the designs which are so easily procurable at this time.

A sampler of Java canvas is more durable, but it is also more expensive, than scrim. Either will answer, a strip one yard long and one half or two thirds of a yard wide making a desirable size. If scrim is used, strengthen it by basting smoothly on plain muslin or drilling. Bind the edge all around with tape or ribbon. Portions thereof or entire designs may then be wrought upon it in the various colors that may be best suited to them.

When not in use the sampler should be rolled in a strip of cloth or a towel, and laid where it will not be crushed or soiled.

If very large designs, such as sofa-pillow covers, are to be preserved in their entirety, it will be necessary to allow sufficient space for these when making the sampler, or to make an additional strip for them.

MAE Y. MAHAFFY.

## Children and Their Activities

Children learn to do by doing. This was Froebel's idea, and a true one it is, as we all know. They also learn to think by thinking. It is important to get children to think, and to think about their surroundings. These things they can observe and search into. You all know how eager children are to touch and to pull about the things around them; they want to tear them to pieces, and in all ways possible to change the condition of things about themselves. They are continually desiring changes.

This activity of theirs, instead of being checked, should be directed and encouraged. If this is done, the children will be perfectly delighted to see the pleasing results which they themselves have brought about. In thus satisfying the creative instinct, the child is taught or led to exercise faculties of both mind and body. The prominence which Froe-



DRESS FOR CHILD

bel gave to this thought of action—his doctrine that man is primarily a doer, and even a creator, and that he learns only through activity—has produced great changes in educational methods.

Children love to use their hands; they not only delight to examine, but they thoroughly enjoy altering whatever they can change. Have you ever noticed how they delight in modeling cows, horses, dogs and sheep from putty, chewing-gum, mud or clay? This idea is utilized in the kindergarten, but we can use it in our homes very satisfactorily in a limited manner. We need to make a study of those things that the child likes to do, and in some manner fill the longing.

ELLA BARTLETT SIMMONS.

## Dress for Child

This dress is suitable for a little girl from two to six years old. The materials required are one and one half yards of Persian lawn, six yards of embroidery, eight yards of insertion, six yards of beading and twenty-five yards of baby-ribbon.

The lawn is cut in squares and hem-stitched with drawn-work. In the center is a rose done in Roman embroidery. The insertion is cut to fit the lawn squares, and set together with fagot-stitch. The squares are set diamond-shape, with lawn filling in the top to



CHILD'S FANCY SKIRT

form the skirt, which is pointed at the bottom. The sleeves are made with a diamond, and filled in at the top and bottom.

O. M.

## A Saturday Morning's Baking

SUMMER MINCE-PIES.—Four crackers rolled fine, one and one half cupfuls of sugar, one cupful of molasses, one cupful of vinegar, one cupful of water, two thirds of a cupful of butter, one cupful of seeded and chopped raisins, spices to taste, two well-beaten eggs. Bake in two crusts. This makes three pies.

BROWN COOKIES.—Two cupfuls of brown sugar and one cupful of butter or meat-drippings creamed together, two eggs, one half cupful of sweet milk, one level teaspoonful of soda dissolved and beaten in one half cupful of molasses, flour to make a soft dough. Roll out one fourth of an inch thick, sprinkle with granulated sugar, and bake in a quick oven.

FAIRY CAKE.—One cupful of granulated sugar and one heaping tablespoonful of butter creamed together, one cupful of sweet milk, one cupful of flour, a teaspoonful of vanilla. Beat the white of one egg until stiff. Sift two teaspoonfuls of baking-powder with another cupful of flour. Add this flour and the white of the egg to the cake-mixture, a little of each at a time, and beat thoroughly. Bake in a shallow tin.

FROSTING FOR FAIRY CAKE.—One cupful of granulated sugar, five tablespoonfuls of sweet milk. Boil five minutes, add one teaspoonful of vanilla, and beat until cold enough to spread. Cover thickly with desiccated cocoanut.

With the egg-yolk left make the following to serve cold for the Sunday dinner: BEEF-LOAF.—One pound of finely chopped raw beef (Hamburg steak), one half cupful of cracker-crumbs, the yolk of one egg, a piece of butter the size of a walnut, salt and pepper to taste. Mix with the hands, form into a loaf, and bake in a bread-tin. Cover the loaf with very thin slices of salt pork. Bake one hour and a half.

HOPE DARING.

## Keepsakes for the Children

How many mothers, when having their children's photographs taken, ever think of giving one to the child for its very own, to keep through life?

I can recall one lot of pictures mother had taken of me when I was about twelve years of age, and how I should love to possess one of those pictures now. I was dressed in my confirmation costume of pure white, with wreath and veil, with my hair hanging in ringlets nearly to my waist—such a picture, in fact, as recalls the most sacred occasion of my young life. But, alas, I do not possess one to show my children, because mother followed the prevailing custom and distributed them all among the relations, except the one she herself retained.

When making the children's clothes, save a small piece of each garment. Get as many small boxes as you have children—shoe-boxes will do—write a child's name on the outside of each box, and when making a garment for one of the children, drop a sample of the material in that child's box. Let the girls make quilts of them for themselves. The boys can have their wives or sisters make quilts for them. Our children, even the boys, love to look over their quilt pieces on rainy days.

Another excellent plan is to let the girls accumulate dishes and glassware by giving them a pretty piece now and then on birthdays and at Christmas-time.

The old-fashioned charm-string which I have saved from childhood days has grown into a beautiful collection of buttons. I have added to it each year, so that it holds several hundred now. Sewing each kind of button on pasteboard cards covered with a bright color enhances the beauty of such a collection.

A. G. CHENORONT.

## A Triple Recipe

In cookery the same foundation recipe may often be made use of in evolving several different dishes. Such a recipe is the one given below:

CREAM PUFFS.—Put in a saucepan one half cupful of butter, and add one cupful of boiling water. When the butter is melted, and the water still hot, add one cupful of flour, and stir until the mixture balls. Remove from the fire, and add four eggs when somewhat cool, beating them in one at a time. Drop the mixture on buttered tins at some distance apart, brush with the white of egg, and bake about thirty-five minutes. This recipe makes twelve puffs. If they are removed from the oven before they are fully baked they will fall, but if returned immediately to the oven they will be all right. When cold, fill with sweetened whipped cream or with a cream filling.

QUEEN FRITTERS.—Use the same mixture as given above. Dip a spoon into deep hot fat, and with another spoon place a spoonful of the mixture on the greased spoon, and lower this into the fat. When well puffed and browned, drain, fill with marmalade or stewed fruit, and surround with a fruit sauce.

DUMPLINGS.—Lower the same kind of batter by spoonfuls into hot soup ten minutes before serving, and cook, covering closely. A beef soup is further improved by having a few green peas added to it.

M. E. G.

## A Printed Pilgrimage

My feet in loose-knit sandals may be dressed,  
Close toasted at the hearthstone of my home;  
While restless tourists wander forth and roam,  
I find the prize they have not yet possessed.  
Here is real progress. Over foreign sea  
My thoughts can roam, and visions may be mine,  
While yet, by prowess of an art divine,  
My home contentment grows more clear to me.

—Alice Cary, in Good Housekeeping.

## Drop-Cookies

Cream one cupful of butter and one and three fourths cupfuls of sugar together. To it add four well-beaten eggs, one teaspoonful of soda dissolved in four tablespoonfuls of sweet milk, half a nutmeg, and four cupfuls of flour in which have been sifted two teaspoonfuls of cream of tartar. Drop from a spoon on a buttered pan, place three or four raisins on each cookie, and bake in a quick oven.

HOPE DARING.

## The Hot Weather

during the summer months is not the best time to try to secure new subscriptions to FARM AND FIRESIDE, but you know the secret of all success is "keeping everlastingly at it," and that is just what we are going to do. We wish that you would ask your neighbors the next time you see them to try FARM AND FIRESIDE for a year at twenty-five cents. We are trying to get a million subscribers to FARM AND FIRESIDE, and kindly ask you to help us in this way. Just a word from you will do the work.



## The Young People

### "Hide-and-Seek"

BY ALICE E. ALLEN

Over the sunny hillside,  
Down the green woodland way,  
Out in grandpa's big new barn,  
Up in the fragrant hay,  
In the strawberry-pasture,  
Over by Minnow Creek,  
All day long the children run,  
Playing at hide-and-seek.

Once on the old step-ladder  
Phillips at last was found,  
Watching with laughing eyes the search—  
He'd made no sign nor sound.  
Once the big clothes-basket  
Gave out a sudden squeak—  
There sat Harriet and Louise,  
Playing at hide-and-seek.

After the sun is hidden  
Back of his golden bars,  
Into the sky to look for him  
Troop all the little stars.  
Then, through the fields of Dreamland,  
Where trees and flowers can speak,  
All night long the children roam,  
Playing at hide-and-seek.



IN THE STRAWBERRY-PASTURE



ON THE OLD STEP-LADDER



IN THE BIG CLOTHES-BASKET

#### Puttin' on Style

THERE seems to be a period in every girl's life when she begins wearing long dresses and spending hours before the mirror doing her hair; when she tries to put on a stiff, unnatural air, in the belief that it is grown-up and correct. She uses the longest words she can find in the dictionary, simpers and sighs, and is the despair of her sensible mother as long as the spell lasts. One dear old lady in our neighborhood calls it "puttin' on style," and that seems to be the idea the girls have until they learn it is a very foolish style.

"Now, Mary Catherine, you just let Mae alone, an' she'll come out all right. All girls have them spells," says this wise grandmother when her daughter lectures the silly maid. "Don't I remember how you called yourself 'Marie' not so awful many years ago? I found your old diary the other day when I was cleanin' the attic, an' brought it with me, thinkin' Mae might like to look over it."

But Mary Catherine puts an emphatic veto on this plan, and the diary finds a resting-place in the stove, where it is forever safe from all eyes. She thinks perhaps mother is right, and that all girls have such "spells," but she wishes her daughter would soon be her sweet, natural self again. Boys at the bashful age and girls at the silly age are equally hard to manage, but only patience will help them all over a really painful period in their lives.

Not long ago a young girl asked for verdant calico in a store, and the proprietor handed out the bright green goods without even a smile, for he has a daughter of his own who is beginning to use what he calls four-story words, so he is not in the mood to laugh at other people's daughters. I was asked by a school-girl not very long ago, "Do you reside in the same locality that you did when I departed to school?" I wished I was related to her sufficiently to give her a piece of my mind, but only for a minute. She will know better in a few years, and be able to laugh when some other girl is "puttin' on style."

It would be truly delightful if the young ladies realized once for all that "house" is quite as good a word as "residence"; that it is still perfectly proper to say "go to bed" instead of "retire," and that it is not an evidence of culture to use words of five syllables unless absolutely necessary. In reading the Bible and the best authors one cannot help remarking the beauty of the short, simple words used. Take the opening stanza of Tennyson's matchless poem, "In Memoriam," and see how many long words he finds it necessary to use in making his sublime declaration:

"Strong Son of God, immortal love,  
Whom we that have not seen thy face,  
Through faith, and faith alone, embrace,  
Believing where we cannot prove."

Example after example might be presented to prove that simple words are best, but the habit of "puttin' on style" must be outgrown. Happy the girl who can look laughingly back at the mental picture of herself, just as she does at the old photograph, and say, "What a goose

I was then!" Until that time father, mother and all the rest of the family will have to possess their souls in patience, and do the best they can with the big words and stilted airs the daughter of the house employs.

If she gets over her "spell" in a few years, no harm is done; but the trouble is, some never recover. We can all call to mind women of forty with the airs of twenty, and it is with this class that the busy world loses patience. It is one of the greatest accomplishments in the world to speak the English language correctly, but this may be done without the use of words whose meaning common people have to guess at. So let us watch ourselves closely, especially when in company with the aged or persons who have little education, and avoid the very appearance of "puttin' on style."

HILDA RICHMOND.

#### Plantin'-Time

When a boy, Uncle Theodore had a teacher who was allus askin', "What yer plantin' ter-day, boys?" We thought it pow'ful curus, seein' none o' us had gardens, but one day in springtime, when the sun was shinin' bright, an' the maples was hangin' out their leetle red flags, an' the bluebirds was a-singin', he said, "Boys, I want yer ter plant things wuth while. Bimeby I won't be here, an' yer'll fergit yer old teacher, but I'd like ter know that yer'd planted suthin that 'u'd last. I allus try ter plant as ef I'd live a hunderd year, an' ter live like every day was my last, an' so I'd like ter see yer plantin' fer the futur. Yer know them nut-trees 'long the river-road, where we had sech a frolic last fall? Wall, the man who planted 'em has been gone more'n twenty year, but his trees will pervide suthin good fer gen'rations."

This thoughtful teacher went ter his reward long ago, but when spring comes Uncle Theodore allus wants ter ask his young friends, "What yer plantin' ter-day, boys?"

Readin' lately 'bout young folks plantin' vines an' flowers, an' beautifyin' their homes an' school-yards, Uncle Theodore couldn't help thinkin' what a heap better chance country folks has fer doin' sech things. Town-improvement clubs are startin' all over the land, but country-improvement clubs 'u'd pay ekerly well. Why not somebody make a beginnin', an' then his neighbors 'u'd foller like a flock o' sheep. Even ef 'twas only a "Pick-up" club, ter remove an' destroy rubbish that litters streets an' yards, an' then plant a few mornin'-glories 'long fences er 'round outbuildin's, 'twould make a heap o' diff'rence in the looks o' the place, an' bimeby they'd want ter git a few shrubs an' posies under the winders. Then they'd manage suthin ter keep chickens an' pigs out o' the front yard, an' cut the grass, an' keep down the weeds, 'specially thistles an' docks. What a chance these young people has in the country if they could only see it, an' make a fashion 'mong their neighbors ter slick up! How things would grow in the sweet country air, an' how easy 'twould be ter feed the growin' things; an' best of all, how dear the old home 'u'd be ter these happy planters!

Young folks most gener'ly haven't the long-sightedness o' old ones, but they've

amazin' infloonce ter help along good things when somebody shows 'em how. Uncle Theodore rej'ices when he 'members the great army o' bright youth who are marchin' forrard, workin' fer the world an' its home-bringin'. But some fellers are like Uncle Eb's mill-pond—jest layin' in the sun, an' growin' up ter weeds. That pond's gittin' leetler every year, 'mountin' ter nuthin 'cept ter sp'ile a good pastur-lot, an' they are shrivelin', an' standin' in the way all the time.

Then it do beat all how some folks never think 'bout their plantin' till the spring rush is on 'em. Bimeby dry times come, an' their crops 'mount ter nuthin. 'Stead o' sittin' down an' lookin' over their fields an' mappin' out plans, they jest go at it hilter-skilter, an' 'thout knowin' zackly what they mean ter do.

Now, there was old Jerry Tyler, allus complainin' 'bout his hard luck. When his neighbors' fields were growin' an' thrivin', his corn an' taters was jest strugglin' 'bove ground. Bein' gener'ly behind in plantin', his crops never notched up with his neighbors'. He couldn't "take time by the forelock," but had no trouble plantin' pennies. It's gener'ly so, that folks havin' fewest pennies plants 'em wastefully. They don't know it, mebbe, but the nickels planted fer terbacker an' beer an' gamin' don't yield crops o' nickels er pennies.

It 'minds me o' the knives us boys used ter plant. Whenever we'd ask daddy fer his knife ter make a whistle er a sling-shot, he'd say, "When d'ye look fer a crop from them knives yer've been plantin' so long?" 'Cause no matter how many he'd bought fer us, we never had one. Wall, sence I've growed up it seems as ef some folks plant pennies jest as we did knives. "Tain't nuthin but a penny," says they, er, "it's only a nickel, an' 'tain't wuth savin'." An' so they never save, er think o' plantin' their pennies so they can reap from them bimeby.

Now, there was Charley Brown, as likely a young feller as could be found—handsome an' friendly, an' everybody thought he'd make some girl a right smart husband. But all of a sudden he took ter plantin' his pennies fer games an' beer, an' 'twa'n't long 'fore he'd squandered the money his grandfather saved fer him, an' then all his earnin's fer drink, an' bimeby he took sick, an' at last died in the poorhouse, an' only his poor old mother ter mourn fer him.

Then there was another chap, poor as a church-mouse—he'd never had a penny give ter him. But he was a worker, an' when he had a spare nickel he put it away, till he saved enough ter subscribe fer a paper er ter buy a book. 'Twa'n't long 'fore Barney had the beginnin' o' a good lib'ry, an' a snug leetle bank-account. Some young folks called him stingy 'cause he wouldn't go larkin' an' spend his money fer frolics; but at last they was glad ter have Barney's help ter git a start in life. He's gittin' an' old man now, an' his children have growed up readin' them same books, an' the ideas they learned have sent 'em out inter the world ter be editin' an' preachin' an' plantin' over an' over the good seed their pa sowed when them "smart Alecks" was makin' fun o' him. It do beat all how good seed is bound ter grow an' keep on workin'.

UNCLE THEODORE.

### When Kemp Went to School—A True Story

For two weeks Brother Clyde and Harold Brown, who had both reached the great age of seven, and were going to the primary school, had talked of nothing else, and Kemp, who had just turned five, listened and wondered, his little heart fairly aching with envy. So you may imagine that when Monday morning came, and the big bell swinging back and forth in the school-house cupola called loudly to the children, "Come, come," and he watched Clyde and Harold march proudly off, he was very lonely and miserable.

All day long Kemp watched and waited, and when at last the boys came back brimful of news of the doings in that wonderful country, school-land, he drank in every word, and wished, oh, so hard! that he might soon be seven and go to the primary school.

The next morning the procession of happy children again answered the call of the big bell, and Kemp was once more left alone. However, it was not a heavy-hearted Kemp this time, but an eager, impatient Kemp with an idea. The idea had come to him while he was eating his oatmeal at breakfast. That was why he had no appetite, and ate so little that mama thought he was sick. You see, she did not know about the idea which had run off with her baby boy's appetite.

When the bell had ceased ringing, and the boys had turned the corner, and mama and Betty, the cook, were busy in the back part of the house, Kemp ran into the house and slipped up-stairs, making no more noise than a mouse.

The door of Uncle Jack's room stood open, and looking in, Kemp spied his uncle's foot-ball sweater—a very attractive garment in Kemp's eyes, with its beautiful red and orange stripes—hanging over the back of a chair. The very thing! At least, so said the idea, and quicker than I can tell you, Kemp got into the sweater, and when he came out again all that could be seen of him were a round, chubby face, a pair of bright brown eyes, a shock of brown curls and two little bare feet. A very funny sight, you may be sure; but then it was all a part of the idea, and not a bit funny to Kemp.

Something more was needed. Running across the hall to mama's room, he opened the closet door. On one of the hooks was a vest of papa's, and yes, not only one pencil, but a whole pocketful, all standing like soldiers in stiff array. Quick as a wink down came the vest, and over the sweater it went.

Now, as papa happened to be a very tall man, and Kemp small even for a five-year-old, the bottom of the vest touched the ground in front, while the pencils came dangerously near the brown eyes; but the little boy with the big idea inside the queer coat did not notice these things. Creeping down-stairs again, and stopping in the lower hall only long enough to snatch his cap off the hat-rack and pick up a large portfolio of pictures that some one had left on the hall table, away trudged Kemp as fast as his little legs would take him, out of the gate, down the street and around the corner, never once looking back, never once stopping until he reached the primary school.

Miss Lulu, the teacher, sat with her back to the door, which stood open, for the day was warm and pleasant, and so it came about that she did not see her new pupil, who stood just inside the room, all out of breath from his run, until the school began to titter; then, following their glances, she turned, and beheld the most comical sight she had ever seen, and although she tried very hard not to do so, she could not help laughing with the children. But Kemp did not understand that they were laughing at him, so he did not care. He only thought that was the way they did at school, and as soon as he could find breath enough he introduced himself in his own way.

"Me's Kemp. Me's come to kool."

"Have you, dear?" said Miss Lulu. "Well, you shall sit in this nice little desk by me, and learn your lesson, while Brother Clyde runs home and tells mama what has become of her other big boy."

That was a proud day for Kemp, and though I suspect he really should have been punished for running away, mama had not the heart to do it when he came home in the evening so happy and gay, but kissed him instead. Then, after all, it was the idea's fault, not Kemp's.

KATHERINE E. MEGEE.

#### That Million-Mark

is a good ways off yet, but if all the readers of FARM AND FIRESIDE will help just a little it will be reached. What is most necessary is for each reader to lend a helping hand by sending in one or two new subscriptions in addition to their own. A commission is allowed on clubs of two or more. If you want the commission, write and ask for it.



## Sunday Reading

### If I Might Kneel

If I might kneel  
Where Jesus' smile could courage give;  
If I sometimes might feel  
His hand in comfort on my head,  
And hear him say, "My little child,  
I know it all. I still will heal  
Each wound. Be of good cheer!"  
If I close to his side might stand,  
And kiss the bruised feet,  
And know he knew it first, and loves me still—

Perhaps, then, in Gethsemane,  
I might make song above my prayer,  
And feel his face bending to see  
My need, and clasp my faltering hand.  
And guide to the white gate, and say,  
perhaps,

"Well done! This is thy Father's house,  
Where many mansions be."

Perhaps, all spent with carrying weight  
In life's sojourn,  
Give humble faith unto his will,  
And say, in prayer, "Thou knowest best.  
Thy will be done,  
So I thy presence earn."

—British Weekly.

### Home Religion

THERE is no greater need to-day than a quickening in home religion. It is beyond question sadly true that we are now reaping all over our land the painful result of irreligious home life. It is evident in all social, domestic and other crimes that shame us. There is no safeguard of our civilization, of the state or of the church that is nearly so strong as that which godly homes furnish. When unbelief or evil dominate here, the flood-gates of iniquity are open, and all wrong finds an ally. There is no institution in the world that can do or undo the wrong in equal measure with the home. The church is a great sufferer at the hearthstone to-day. It seems an uneven task to teach children in the Sunday-school, when it is not supplemented by prayer and example in the home. The responsibility of parents—not of one, but of both—is very grave here. No condition or pretext can excuse us. It is easier to live right than wrong—to trust and obey God rather than the world, the flesh and the devil; and the difference in the result is the difference between light and darkness. God's Word puts a distinct mark upon the Christian and unchristian home. There is no culture or display of wealth, no earthly comfort that can substitute the family altar. A prayerless home is like a house without a roof—wholly incomplete. There is no assured hope for the home as long as it is prayerless. On the other hand, a family gathered about the altar of prayer in the morning, the father reading the Word of God, or the mother in his absence or refusal, and then commending all to God for the day, this is a most forceful example and testimony, and one of the most beautiful pictures of heaven ever witnessed on earth. After that you may have equipage and splendor, put on diamonds and costly garments, if you can, but without God's altar in the house they are mockery and a vain show. The merciful God increase the number of quiet Christian homes.—Rev. Dr. Rhodes, in St. Mark's Messenger, St. Louis.

### "Unto What is the Kingdom of God Like?"

The kingdom of God is not a place of externalities, not meat and drink, but it is "righteousness, peace, and joy in the Holy Ghost." This kingdom "cometh not with observation; neither shall they say, Lo, here; or lo, there; for, behold! the kingdom of God is within you."

The kingdom of God is not external, but internal; not a thing of localities and observation, but of consciousness and within. It is established wherever we find loyalty to God's cause, wherever love controls and righteousness prevails.

The affairs of the kingdom are of such importance and magnitude that Jesus urges all to "seek first the kingdom of God and his righteousness." This does not mean that in order to engage in the work of the kingdom the merchant must leave his store, the wife and mother neglect her home and children, the doctor abandon his patients, or the lawyer forsake his clients; but it does mean giving the affairs of the kingdom right of way in our lives while engaged in our different vocations; it means that righteousness, peace and joy should be with the storekeeper, dwell in the home with the wife and mother, go with the doctor and abide with the lawyer.

The fact that Matthew was a tax-gatherer did not keep him from being a preacher of righteousness; Luke, though a practising physician, found time for

advocating the principles of meekness; Paul, though earning his living at tent-making, was ever ready with a sermon on repentance or justification by faith; Jesus, though a carpenter, was not hindered in advocating the principles of God's kingdom. The affairs of the kingdom must not be separate and apart from our daily toils, but must be in them. We make a mistake if we limit the scope of God's kingdom to the sanctuary, the Sabbath, or some special work. God is everywhere, and his kingdom is set up wherever the law of love controls and righteousness prevails. Wherever we find loyalty to God and his cause, let it be in the life of the individual, in the life of the nation, or in the social conscience; there we look for and find the kingdom of God.

"Unto what, then, is the kingdom of God like?" Jesus says, "It is like a grain of mustard-seed, which a man took and cast into the ground, and it waxed a great tree."

This kingdom had a small beginning. Its first preachers were not men of worldly renown. Jesus himself was poor, and ended his earthly life by the death of a malefactor on the cross. His early followers were selected from the humbler walks of life. His teachings and doctrine were such as to cause criticism and opposition from those in authority. Yet this grain of mustard-seed, having been cast into the ground, is waxing a great tree, and the influence of the kingdom of God, as preached by Jesus and his followers, is destined to be felt by all the peoples of the earth.—James W. Baker, in Western Christian Advocate.

### God Knows

In hours of sickness we want a physician who will tell us the worst. In moments of remorse for transgression we want the full truth. The way to flee from God is to flee to God. Some time ago a skillful physician detected certain threatening symptoms in himself. His medical skill caused him to be the more careful. At last, thoroughly alarmed, he went to a physician who was no wiser than himself. The thought of his home, of his large practice, of his career, perhaps, made it difficult to front all the facts. Perhaps he hid this symptom from himself, and overlooked that symptom, concealing both from his counselor.

But one day the man said, "This is all wrong. I want to know the worst. The best counselor is the one who speaks the truth even to brutality." So he sought out the world's greatest expert, a man who was widely known for his bluntness, and gruffness as well. He told this great physician every secret thing, emphasized every minute incident that could magnify the danger, and at last the physician said, "There is no reason why you should not surmount all of these weaknesses, overcome this organic trouble, and secure perfect health again." In that hour what a load rolled from the sick man's mind! Great fears, like clouds, dissolved and passed away. He passed from despair to hope, from doubt and apprehension to happiness and health. And the basis of our happiness is God's exhaustive knowledge of our sinfulness. He knows our weakness altogether. Others may be disappointed and lose all hope; God never. Your mother, your father, yea, the wife of your bosom, may forswear all hope, but if there be a single spark of good that remains, God will nurture the smoking flax into the full flame of victory. God is love, and his love suffers.—Hillis.

### Tuning the Strings

Without stress and strain, life would lose its tone and timbre. When God puts upon a faithful servant of his any severe strain of mind or body or spirit, he does so in wisdom and love. He knows that no life is at its best until it can prove itself finer and more resonant under strain than without it. As a saintly New England minister put it, "God tunes us up as a piano-maker tunes the strings, by straining us severely. The strings do not give forth their intended notes until they are tuned up, and God knows that we are like them." It is good for us to remember that the tuner does not seek to break the strings, but to make them fit for music.—Sunday-School Times.

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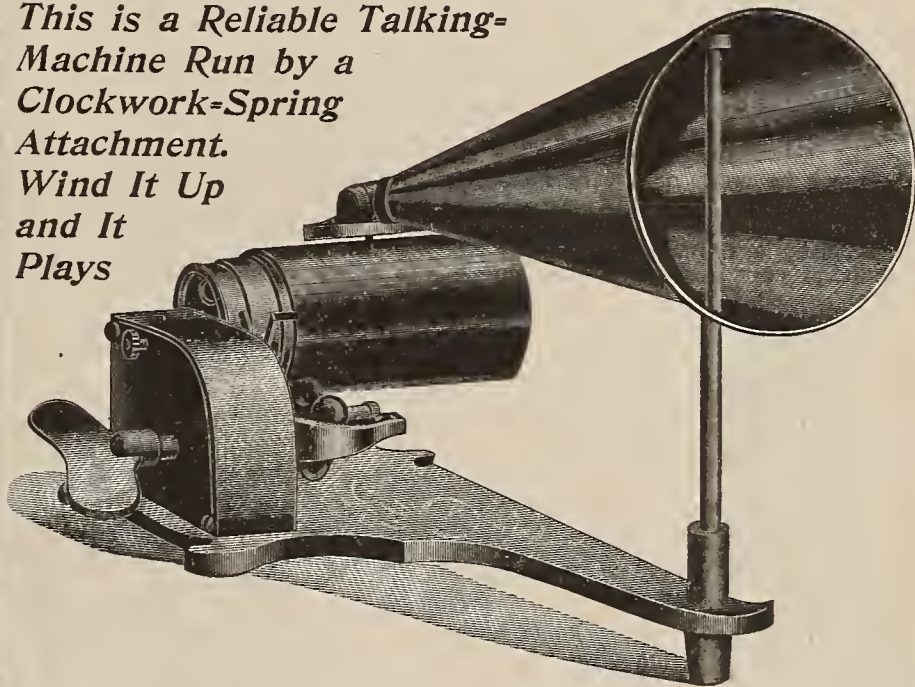
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(Manufactured by The Columbia Phonograph Company) of New York City

*This is a Reliable Talking-Machine Run by a Clockwork-Spring Attachment. Wind It Up and It Plays*



## A Columbia Phonograph

This is a genuine talking-machine, playing all the music that is produced on the high-grade, expensive phonographs. It winds with a key, and runs by means of a spring motor—you don't have to turn a crank, as is the case with cheap talking-machines.

**The machine is guaranteed by  
The Columbia Phonograph Co.**

to be exactly as represented and to give good satisfaction. It takes identically the same records as those which are used on

## A \$50.00 Machine

The tones are loud and clear, and it is just the thing for home entertainments and to play out on the porch in summer evenings. It is a good all-round machine, and bound to give good service. The machine is sent to you complete, with music, horn, everything ready to wind up and start; it sings, laughs, plays all kinds of difficult music. When we send you the machine we will tell you how to secure all the new records and whatever kind of music you like without cost.

## How to Get This Excellent Talking-Machine FREE

Send us your name and address on a postal-card to-day. We will send by return mail eighteen coupons, each one of which is good for a year's subscription to one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself. You sell these coupons to your friends and neighbors at 25 cents each. They will gladly take advantage of a chance to get a good paper one year for 25 cents. When the coupons are sold, you send the \$4.50 to us, and we will forward the talking-machine, together with music. If you don't want a talking-machine, perhaps you know of some boy or girl who would like to earn one. If so, send us the name and address, and we will send offer by return mail. Many have earned talking-machines by our plan, and you can do it in one day's time. Write to-day.

Address FARM AND FIRESIDE, Springfield, Ohio



## How to Dress



BLOUSE WITH BERTHA AND PLAIED SKIRT

### Blouse with Bertha and Plaited Skirt

THE simple graduating-gown is the gown that is in best taste for commencement day, especially for the school-girl graduate. The advantage of this dainty frock is that though it can be made of a very inexpensive material, it will still have a charming air of style. The simple blouse is given a touch of originality by its pointed yoke laid in tucks, from

bands of lace insertion matching the lace used on the bertha. Voile Egyptienne is one of the new inexpensive materials which would make up prettily for a dress of this sort. It is very lovely in white, is sheer, and has a glistening effect. It comes forty inches wide, and sells for thirty cents a yard. White chiffon-finish organdie or white batiste would also be appropriate materials for this frock. The girdle belt may be of white taffeta with the soft messaline finish, or in pale golden yellow, almond-green, or in the class color if it happens to be a delicate shade. The pattern for the Blouse with Bertha, No. 272, is cut for 32, 34 and 36 bust measures. The pattern for the Plaited Skirt, No. 273, is cut for 22, 24 and 26 waist measures.

### Puffed Waist and Full Shirred Skirt

Here is a quaint little commencement-gown which will just suit the girl of picturesque tastes. It is the style of frock, also, which will be fashionable for an informal evening gown for many a long day to come. For the young girl whose figure is not yet fully developed the two deep puffs forming the front of the waist will prove very becoming. The yoke has the long-shouldered effect, and is finished back and front with three rows of shirring. The waist fastens in the back, where it is made slightly bloused. The high fitted girdle, which is deeper in the front than in the back, is one of the quaint touches seen in this season's fashions. It is six inches high in the front, and ornamented with a pretty buckle. At the back the fastening is concealed with two rosettes, from which long sash-ends depend. The elbow-sleeve is made in the form of a double puff tied in the center. The sleeve-ribbon matches the girdle in color. The full shirred skirt makes a delightful dancing-skirt, as it is made instep-length. A deep hem finishes it at the bottom. The shirring at the top is the same in the back as it is in the front. Plain chiffon-finish organdie would make this gown very dainty and lovely, or Tussah silk mousseline might be used. This is one of the prettiest of the new summer wash-materials. It comes thirty inches wide, and sells at

lem with a woman just what is best to tuck away in her dress-suit case when she is starting on a journey that means a night or more in sleeping-cars. A gown of this sort she need have no hesitancy in wearing when going from her berth to the dressing-room. It is a kimono made with a fitted back and a loose front. There are three rows of shirring on the shoulders, and the sleeve is the true kimono model. The gown may be of French flannel with a ribbon border, or of quilted silk, cotton crêpe or light-weight eiderdown. The pattern for the Kimono Dressing-Gown, No. 267, is cut for 34, 36, 38 and 40 bust measures.

### Fancy Blouse and Gored Skirt with Shirred Panels

This very novel costume for the girl graduate would be dainty and pretty in plain silk muslin combined with dotted silk muslin, or in crêpe de chine combined with crêpe pontille. Crêpe de chine is now selling as low as fifty-nine cents a yard, and crêpe pontille, which has such a pretty silk fleck, can be bought for seventy-five cents and one dollar a yard, according to the width. The blouse is made with a deep yoke back and front; below the yoke the blouse is shirred and strapped with box-plaits both back and front. Lace medallions form the trimming. A deep shirred girdle finishes the bottom of the waist. The skirt is cut in seven gores, and is made with inserted graduated shirred panels. This skirt is unusually smart in style. The pattern for the Fancy Blouse, No. 278, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Gored Skirt with Shirred Panels, No. 279, is cut for 22, 24, 26 and 28 waist measures.

### Blouse with Lace Yoke and Shirrings and Flounce Skirt

Embroidered batiste, French gazine, novelty voile, crêpe pontille and embroidered Tokio silk mousseline are all materials well adapted for this girlish frock. The waist is made with a deep lace yoke back and front, which is exaggerated in depth by two puffings banded with rows of shirring. Below this there



LADIES' MATINEE

back. The pattern for the Blouse with Lace Yoke and Shirrings, No. 280, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Flounce Skirt, No. 281, is cut for 22, 24, 26 and 28 waist measures.

### Ladies' Matinee

This negligée jacket is pretty for breakfast wear, and worn with a long silk petticoat may take the place of the conventional house-dress. As it is plaited, it should be made of some sheer soft material, like silk voile or chiffon cloth, and fashioned over a fitted lining. The graceful shoulder-cape trims the back as well as the front. The round low neck is outlined with lace, and two long stole-ends of lace fall down the front. The pretty sleeve consists of three full frills of the soft material mounted on a lining. Liberty satin is used for the girdle belt. The pattern for the Ladies' Matinée, No. 260, is cut for 32, 34, 36 and 38 bust measures.



BLOUSE WITH LACE YOKE AND SHIRRINGS AND FLOUNCE SKIRT



KIMONO DRESSING-GOWN



PUFFED WAIST AND FULL SHIRRED SKIRT



FANCY BLOUSE AND GORED SKIRT WITH SHIRRED PANELS

which a deep plaited bertha falls. The neck is cut just low enough to be graceful and pretty for a young girl, and the blouse fastens in the back. A short plain elbow-sleeve is hidden beneath the bertha. The girdle is of ribbon. The blouse is made the same back and front. The graceful plaited skirt is cut to well escape the ground all around. The lower part of the skirt is trimmed with two

twenty-five cents a yard. The pattern for the Puffed Waist, No. 274, is cut for 32, 34 and 36 bust measures. The pattern for the Full Shirred Skirt, No. 275, is cut for 22, 24 and 26 waist measures.

### Kimono Dressing-Gown

This kimono dressing-gown will be found invaluable for the woman who travels. It is always more or less a prob-

lem with a woman just what is best to tuck away in her dress-suit case when she is starting on a journey that means a night or more in sleeping-cars. A gown of this sort she need have no hesitancy in wearing when going from her berth to the dressing-room. It is a kimono made with a fitted back and a loose front. There are three rows of shirring on the shoulders, and the sleeve is the true kimono model. The gown may be of French flannel with a ribbon border, or of quilted silk, cotton crêpe or light-weight eiderdown. The pattern for the Kimono Dressing-Gown, No. 267, is cut for 34, 36, 38 and 40 bust measures.

### PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

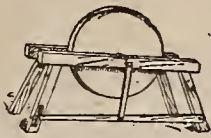
Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.



## Prize Puzzles

We Want to be Neighborly, and so Invite all of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quickens the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.



## SHAKESPEAREAN-QUOTATION PUZZLE

### ADVICE TO THE YOUNG (A PUZZLE)

In this story is hidden a familiar Shakespearean quotation. One word, "that," is given intact, and is printed in black-face type; the others are hidden in the text, and are formed by the last letter or letters of one word and the first letter or letters of the word following. Can you find the lines from Shakespeare?

"Young people should not obey their fun-loving instincts entirely; each should go rather according to his desires in other and more serious lines. He should do this not only for a time, but year in and year out; let him grab every chance, **that**, like Aladdin's lamp, shall, when properly used, bring forth genii, slumbering beneath, eager to aid, and who will exclaim in answer to their each request, 'I only know to do thy bidding.'"

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct Answer; Two Dollars to the First Girl from Whom we Receive a Correct Answer; Two Dollars to the First Man from Whom we Receive a Correct Answer, and Two Dollars to the First Woman from Whom we Receive a Correct Answer. Contestants Must State Their Ages, and Answers Must be Received Before June 15th.

### ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a picture entitled "God Speed" will be given for the first correct answer received from each state and territory. This means a picture for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize,

giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the pictures will be given to the person sending the second correct answer, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

### ANSWERS TO PUZZLES IN THE MAY 1st ISSUE

#### Proverbs

- 1—A cat may look at a king.
- 2—All the fat's in the fire.
- 3—All our geese are swans.
- 4—Be sure you're right, then go ahead.
- 5—Better a witty fool than a foolish wit.

#### The Picture Conundrum

- 6—It is a foul (fowl) proceeding.

Only one person sent in a correct list of answers to this puzzle, L. F. Channon, Washington, District of Columbia, to whom is awarded the cash prize of two dollars.

#### The Traveling Alphabet

The players sit in a row, and No. 1 mentions the name of some city beginning with the letter A to which he is going, and he asks his neighbor what he shall do there. No. 2 must make an answer in which all the verbs and nouns, adjectives and adverbs begin with an A. He must then name a city beginning with the letter B, and ask his neighbor what he shall do there, and the answer must be given in the same way, the principal words beginning with the letter B.

1. QUESTION—I am going to Amsterdam. What shall I do there?  
ANSWER—Admire all articles.
2. QUESTION—I am going on a journey to Baltimore. What shall I do there?  
ANSWER—Be bothered by bugs.
3. QUESTION—I am going to Cincinnati. What shall I do there?  
ANSWER—Consult clever citizens.
4. QUESTION—My journey is to Dresden. What shall I do there?  
ANSWER—Dance daily delightfully.
5. QUESTION—I am going to Edinburgh. What shall I do there?  
ANSWER—Enjoy every evening.
6. QUESTION—I shall visit France. What shall I do there?  
ANSWER—Fan Frenchmen furiously.
7. QUESTION—I am going to Germany. What shall I do there?  
ANSWER—Give Germans great guns.
8. QUESTION—I am going on a journey to Holland. What shall I do there?  
ANSWER—Haul hay homeward.
9. QUESTION—I am going to India. What shall I do there?  
ANSWER—Indulge in idleness.
10. QUESTION—I am going to Jersey. What shall I do there?  
ANSWER—Just jump joyously.
11. QUESTION—I am going to Kentucky. What shall I do there?  
ANSWER—Kill kangaroos.
12. QUESTION—I am going to London. What shall I do there?  
ANSWER—Lie lazily on lounges.
13. QUESTION—I am going to Maine. What shall I do there?  
ANSWER—Murder many mosquitoes.
14. QUESTION—I shall visit Niagara. What shall I do there?  
ANSWER—Narrate notorious narrations.
15. QUESTION—I am going to Ohio. What shall I do there?  
ANSWER—Open oysters.
16. QUESTION—I am going to Paris. What shall I do there?  
ANSWER—Pare potatoes patiently.
17. QUESTION—I am going to Quebec. What shall I do there?  
ANSWER—Quietly quit quarreling.
18. QUESTION—I shall make a journey to Rome. What shall I do there?  
ANSWER—Receive rich Roman relics.
19. QUESTION—I am going to Siberia. What shall I do there?  
ANSWER—Spear seals and sell skins.
20. QUESTION—I am going to Trenton. What shall I do there?  
ANSWER—Take tea to the townsmen (etc.).—Youth.

#### Li'l Drum

Whut de matter wif yo' noise,  
Li'l Drum?  
Hit's as silent as de toys,  
Li'l Drum!  
Top an' bottom busted in,  
Dust an' rust am on de tin  
Whah de tunin'-straps hab been,  
Li'l Drum!

Dat ol' hole look mighty bad,  
Li'l Drum!  
Droopin' lak a mouf dat's sad,  
Li'l Drum!  
Dem two li'l holes in you—  
Whah de sticks go pokin' 'roo,  
Lak de baby's eyes ob blue,  
Li'l Drum!

'Member how ol' mammy scol',  
Li'l Drum!  
When de racket git too bol',  
Li'l Drum!  
It was music low an' sweet,  
'Side de noise ob silent feet  
Dat hab halted wif yo' beat,  
Li'l Drum!

Am yo' heart so sad an' so',  
Li'l Drum!  
Dat you can't tune up no mo',  
Li'l Drum!  
Seems I hyah you gib a sigh—  
Lak de baby did, an' cry,  
When he kiss an' say "goo'-by,  
Li'l Drum!"

Ise a-feelin' sad myse'f—  
Li'l Drum!  
You is all dat Ise got lef',  
Li'l Drum!  
Tears am patterin' to-day  
On yo' haid, lak baby play—  
'Fo' de Lawd tuk him away,  
Li'l Drum!

Mighty ha'd to tote de load,  
Li'l Drum!  
Ploddin' 'long de lonely road—  
Li'l Drum!  
But de One dat know de bes'—  
Gwine to call us up to res',  
Wid de baby, on his bres',  
Li'l Drum!

—Bert Flansburg, in Chicago Record-Herald.

#### Conundrums

What is that which you can keep after giving it to some one else? Your word.  
Why is a lucky gambler an agreeable fellow? Because he has such "winning" ways.  
Why is a policeman like a rainbow? Because he rarely appears until the storm is over.  
Why is a little dog's tail like the heart of a tree? Because it is farthest from the bark.  
What great Scotchman would you name if a footman knocked at the door? John Knox.  
Why are quinine and gentians like the Germans? Because they are two tonics (Teutonics).  
Why are nose and chin at continual variance? Because words are always passing between them.  
How were Adam and Eve kept from gambling? Their pair o' dice (paradise) was taken away from them.  
What is the difference between a cow and an old chair? One gives milk, the other gives way (why).  
Why is a person with his eyes closed like a defective schoolmaster? He keeps his pupils in darkness.

#### A New War-Story

will start in the June 15th issue of FARM AND FIRESIDE, and it will be one of the most interesting and best war-stories you ever read. It is entitled "Two Girls Against Eighteen Thousand Men." It might surprise you to know which won. It's a good one, anyway, and you want to look out for it.

# The \$100.00 PRIZE

which was offered to the person who would suggest the most appropriate name for the New Prize Picture advertised below has been awarded to

**Mrs. Julia Carlin, Lawrence, Kansas**  
Rural Free Delivery No. 10

Mrs. Carlin suggested the name "A Cluster of Beauties," which the committee after much deliberation decided was the most appropriate name suggested.

AN ELEGANT REPRODUCTION OF A

# Magnificent Painting

Entitled "A Cluster of Beauties," and  
the Farm and Fireside one year, for only 40c.

This handsome picture is reproduced in ten colors and gold, and all the tints and colorings of the original painting are carefully preserved and brought out.

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. IT IS FRESH FROM THE ARTIST'S BRUSH, AND NEVER BEFORE OFFERED TO THE PUBLIC. so that Farm and Fireside readers have the first opportunity to secure a copy.



REDUCED ILLUSTRATION

A CLUSTER OF BEAUTIES

SIZE, 20 BY 30 INCHES

**A LARGE GOLD FRAME** If you will notice the illustration you will see that the artist has displayed more than the usual amount of genius. He has painted a wide gilt border, in exact imitation of a gold frame, so that a frame is not needed. It has the full appearance of a handsome gold frame three inches in width. All that is necessary is to fasten the four corners to the wall with pins, and it will have the full effect of a magnificent picture in a heavy gold frame. It is quite proper at the present time to hang works of art without frames. However, this picture can be framed if you so desire.

**SIZE** The size of this magnificent new work of art is about 20 by 30 inches, which makes a large and elegant wall-decoration. The cut on this page is greatly reduced in size.

**TEN COLORS** The colors and tints, the lights and shadows that the artist uses in his make-up of this work of art create one of the most striking and exquisite pictures of its kind that we have ever seen. The artist has employed no less than ten of the most delicate and beautiful colors and gold in his creation of this charming work of art.

**THE SUBJECT** of this exquisite painting is that of a beautiful young woman wearing a gorgeous heavy lace-over-silk dress, making one of the prettiest and most expensive gowns ever produced. In her hair she wears a diamond crescent, and about her neck a costly pearl-and-diamond necklace. She is standing among beautiful chrysanthemums, which tend to produce a most delicate and pleasing effect. Altogether it is one of the most beautiful pictures of its kind ever produced, and we are sure that all who receive it will be more than pleased with it. The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. Order as No. 54.

**FREE** This Magnificent Picture, "A Cluster of Beauties," will be given FREE and sent post-paid to any one sending TWO yearly subscriptions to FARM AND FIRESIDE at the regular price of 25 cents a year.

Address FARM AND FIRESIDE, Springfield, Ohio



"I CAN do nothing for Olive," said Doctor Tuckerman, our family physician. "Two or three years in Colorado would cure her, I believe. The climate there would do for her what no care or medicine can do here, provided, of course, that her going there is not delayed for too long a time—six months hence may be too late."

"Which means an expenditure of one thousand dollars, at least," said I, as soon as the door had closed behind our honest medical adviser. "Where the money is to come from is quite beyond my comprehension. Surely it cannot be dug out of a little old run-down, worn-out hill-farm like ours."

"Don't be discouraged," said my wife, who would find some bright side to a Kansas cyclone; "Providence will make a way out of the difficulty."

"But Providence isn't showering down money in one-thousand-dollar flakes in our home," I replied, with some bitterness, when a sharp knock at the door put a period to our conversation, and brought me face to face with a handsome stranger with black, searching eyes, black hair and beard, and such a lofty forehead as I had never before seen.

"Are you open for an engagement, Mr. Sechelle?" was the prompt query with which the new-comer proceeded to business.

"I should be glad of any honorable, well-paid employment," I replied, "especially such as would not oblige me to give up entirely our little farm or remove my family. Such, I fear, will not come to me in this out-of-the-world place, but I should be very grateful for it."

"As to the honorable character of the work," replied the black-eyed man, "I refer you to your summer neighbor, Judge Maynard, who recommends you. I have searched New England to find such a vast unimproved tract as lies north of here, and have finally, through the Judge, who has been my New York attorney for years, purchased about ten thousand acres, of which I wish you to take charge. I am a chemist and inventor, already wealthy from the profits of former inventions, but it is not in my nature to be idle. I propose to erect in the center of that wilderness a laboratory, where I shall be beyond the prying eyes of those who would steal the fruits of my studies. I shall pay you one thousand dollars a year, and that you may not have the least doubt about the security of your wages, I shall do a most unusual thing, and make the whole year's payment in advance. I want a man with whom any secrets of mine will be safe if he chances to learn them. Judge Maynard says you are that man. All I want of you is the oversight of my property. You will still be free to look after your own farm and to do considerable work upon it. Do you accept?"

"Certainly and gratefully," I replied.

"Meet me at two o'clock this afternoon at Judge Maynard's home," he concluded, and withdrew.

"What a handsome man!" exclaimed my wife, who has such an eye for beauty that I have never ceased to wonder that she ever accepted me.

"What a forehead!" I replied. "I don't think I ever saw such a brainy-looking man."

That afternoon every detail was settled, including the payment of the one thousand dollars, and the stranger, whose name Judge Maynard gave as Prof. Humboldt Davy, of his own free will gave me a writing to the effect that in the event of my death, sickness or disability during the year he should have no claim for the repayment of any part of the salary. Our daughter Olive was soon on the way to Colorado with a trusty attendant, and I was as busy as a bee in overseeing gangs of laborers who were making improvements upon the Professor's ten-thousand-acre tract, which he insisted upon naming simply the "Wilderness."

First of all we inclosed the whole territory with a barbed-wire fence, man and dog proof, ten feet high. I was happy, for I enjoyed action—there was no poetry in my nature. I was always averse to study, but give me a road to build, a forest to clear up, or a swamp to drain, and I was in my element.

Professor Davy selected a ledgy knoll near the center of the Wilderness as the site for his laboratory. From this spot, which he christened Pine Crest for the few dwarfed pines growing upon it, we built a road to the nearest point in the public highway, or "county road," a distance of three miles. We blasted ledges, felled trees, crossed swamps, and finished our road with a top-dressing of gravel. As the Professor usually rode horseback, we made numerous bridle-paths to all parts of the Wilderness. At the main entrance was placed a ponderous iron gate, and near it, being on an eminence, a little house containing the Professor's pride, a fine terrestrial telescope.

All this was done, telephone-lines run from my own home to many points from which the Professor might wish to summon me, and rough buildings erected at Pine Crest, before anything occurred to give me a revulsion of feeling against my employment. Then my employer ordered a large quantity of dynamite placed in the ledges of Pine Crest—enough by its explosion to scoop out a bowl where the hillock stood. "We will advertise these charges well," he said. "Perhaps it will have the effect of keeping away would-be visitors."

I had handled tons of explosives, and boasted that I had no nerves, but it was long before I could approach Pine Crest without a nervous, apprehensive feeling quite new to me.

Professor Davy was an enigma. Why a city-bred man of the finest sensibilities should exile himself to the Wilderness was to me inexplicable. Even on those rare occasions when he visited the metropolis, traveling over a road of which he was a stockholder, he preferred the freight-caboose to the parlor-car.

After the improvements were completed no one was allowed in the sacred confines of the Wilderness but the Professor and myself. Life was just beginning to sink to the level of the monotonous again, when I was one day electrified by a novel sight. I was on a commanding elevation, where I had just repaired a slight break in the barbed-wire fence. It was autumn, and if there had been a particle of poetry in my nature

## A Strikingly Handsome Man

By CHARLES SHELDON FRENCH

it would have developed then. The trees were colored with a gorgeousness which travelers tell me can be seen nowhere else but in New England. It was a beautiful panorama—or it would have been to any one who could appreciate it—but I saw something else. Although it was a clear day—so clear that I could see the profile of mountains fifty miles away—Pine Crest, with laboratory, rocks and trees, had disappeared. In its place was a mountain of darkness. I can compare it to nothing but a chunk cut out of the darkest night ever seen, and dropped down over the Professor's quarters. It spread gradually for half an hour, until about a fourth of a mile in diameter. In another half-hour it had vanished.

When I next met Professor Davy, he asked, "Did you witness my last experiment?"

"I saw something very strange," I replied.

"How great was the darkened area?"

"About a quarter of a mile in diameter. I noticed certain landmarks from which we can obtain the bounds more accurately if you wish."

"Never mind that. Of how long duration was the darkness? I could not see my watch, as it is one of the peculiarities of this darkness that no known light will penetrate it."

"Half an hour passed before it reached its greatest size. In another half-hour it disappeared."

"Very good. I am glad to get these data. This appearance is produced, of course, by chemicals. I have had great difficulty in producing a darkness of any extent or duration."

"But what practical use can be made of such an invention?" I was bold enough to ask.

"That remains to be demonstrated," he replied, so modestly that I felt ashamed of my impertinence, adding, "However, I have very favorable offers for it from a foreign government. Our own declines to consider it."

I was more mystified than ever. What could any government want of such an invention?

Professor Davy soon left us, saying he had business for a few days in Chicago. When I opened my newspaper on the way home from the post-office the following week (being so far back in the country we did not take a daily), I was thunderstruck by the following:

### UNIQUE ROBBERY IN CHICAGO

The robbery of the Inter-Ocean Bank was accomplished near midday Tuesday by means which have no parallel in the history of crime. In the midst of a great rush of business the banking-rooms were suddenly enveloped in total darkness. Gas and electric lights were lit, but such was the uncanny nature of the darkness that the lights would not penetrate it. The darkness extended over a radius of forty rods in every direction from the bank, being impenetrable by sunlight. Within this area pandemonium reigned, the cry being raised that the end of the world had come. When the darkness cleared away, an hour later, an enormous sum, not yet exactly known, was missing from the bank. Enough is known to identify one of the robbers, who is described as a strikingly handsome man, with piercing black eyes, black hair and beard, and a never-to-be-forgotten forehead. The unusual character of the crime warrants the extraordinary offer of twenty-five thousand dollars to locate the above-described suspect. He escaped, but it is believed the officers have a clue to his whereabouts.

This, then, was the end. My employer and benefactor was a gigantic scoundrel. The newspaper paragraph took away my strength. When I reached home I collapsed into the nearest chair, all in a heap, with a groan that frightened my wife.

"Would you have believed that our friend was such a villain?" I asked, when she had read the announcement.

"No, I shall not believe it," she replied.

"But how can you disbelieve it?" I remonstrated.

"Professor Davy has gone to Chicago; this description exactly applies to him and his invention. He has been very liberal to us, to be sure, but only that he might rob others—widows and orphans among them, whose all was intrusted to that bank. Twenty-five thousand dollars—a small fortune—for conferring a public benefit! I can notify Sheriff Mallory in half an hour. Then, when the robber returns, he will walk right into—"

"Francis Sechelle!" screamed my wife, "are you a man or a fiend? You profess to be a Christian! Are ingratitude and treachery Christian traits? Are you going to play the part of a Judas toward the man who has been our salvation? You shall never do it! Be sure there is some mistake. Professor Davy is not guilty of this."

It was my turn to be frightened, as I looked at the white face and heard the excited voice of my usually mild and delicate wife. "Don't get excited," I pleaded. "Perhaps you are right. Woman's intuition is sometimes better than man's reasoning."

Still I believed the Professor guilty, and I passed the following night in wretchedness, feeling that my wife's mistaken sentiment had prevented my improving the only opportunity which would ever come to me of earning a competence by a single stroke. Next morning, having no heart for work, I sauntered toward the village, if that can be called a village which consists only of a church, a school-house, a store and a single dwelling. I met my employer, on horseback.

"Please notify me by telephone if any one inquires for me," he said, and galloped away toward the Wilderness.

At the store, which was likewise the post-office, I obtained a daily newspaper, and was absorbed in its contents when three strangers entered and engaged

the merchant in conversation. "I can tell you nothing," I heard the latter say, "but there is his foreman, Mr. Sechelle."

I made a hasty attempt to withdraw unnoticed, but was intercepted by the spokesman of the three. "We wish you to conduct us with the utmost dispatch to Professor Davy," he said, at the same time satisfying me of his authority as an officer of the law.

"But suppose I have pressing business in another direction?" I replied, making an effort to appear calmer than I felt. The sight of my employer had awakened my old confidence, and I was anxious to keep faith with him and with my wife.

"You can have no more important business than we have with you, and an unwillingness on your part to introduce us to your employer will tend to implicate you both and make it necessary to arrest you as an accomplice," was the reply which left me no alternative, and we were soon all together in the "two-seater," and speeding toward the Wilderness.

Bitterly I regretted my trip to the post-office, as I could not now telephone my employer without awakening suspicion. But as we passed my own home my wife was caring for her plants and shrubbery in front of the house, in anticipation of winter. "Gentlemen," said I, "I am not going into danger without kissing my wife," and I jumped from the wagon, and was quickly mingling kisses and whispered words to my wife something after the following manner: A kiss on the right cheek—"Telephone"—a kiss on the left cheek—"Professor"—a kiss on the lips—"officers"—a kiss on the forehead—"are coming"—a kiss on the chin.

"I always worry about my husband whenever he goes near that mine," said my wife, as if in explanation, as we drove on again.

"What mine does she allude to?" asked Officer Number Two.

"A large quantity of dynamite is placed in the rocks under Professor Davy's laboratory, and he will not hesitate to explode it if there is danger that his chemical secrets are to become known to strangers," I replied, adding, "but there are electrical signals on the road to warn us."

At the gateway of the Wilderness I noticed gladly that the Professor's "noxite," as he had named his new compound, was beginning to work. A small cloud was gathering on Pine Crest. If my companions failed to notice it, it was perhaps owing to the distance, and to their disappointment at finding that I had no key to the big gate, and that we must finish our journey on foot. Half an hour later, in a deep wood, I was not surprised when a big sign (my own handiwork) dropped across our path, reading:

### SEEK SHELTER—THE MINE IS FIRED!

I sprang behind a big hemlock, my companions seeking the shelter of other friendly trees. It began to grow dark, the darkness soon becoming total.

"We are on the track of the right man, and he is playing his Chicago trick," said Officer Number One, and his remark was punctuated by a terrible explosion.

When light returned, it revealed not the road alone, but the whole forest, littered with small fragments of rock, broken branches, and even small tree-trunks, the wreckage growing more abundant and of larger size as we advanced.

"If that isn't cryolite!" exclaimed Officer Number Three, picking up a white fragment of rock.

"What is cryolite?" asked Number Two.

"It is a stone found hitherto only in Greenland, in the Ural Mountains, and in small quantities in Colorado. It was formerly the principal source of the metal aluminum, or aluminium, but the French clay, bauxite, has now taken its place, partially, at least. I paid pretty dearly for this bit of geological knowledge," replied Number Three.

Further on the pieces of this stone became abundant and of larger size, and when we reached the spot where Pine Crest had been, but where we found only a ragged chasm, the surface uncovered by the explosion was wholly composed of this white stone.

"Now, gentlemen," said I, "I have obeyed your orders. Here is the site of Professor Davy's laboratory. As to where that gentleman himself is at present you have as much knowledge as I. What is your further pleasure?"

To my great relief I was excused from further service. We retraced our steps to the gate. I unlocked the gate-house. (I had that key.) I swung the telescope quickly around toward a trail of smoke on a mountain-side miles away, where a heavy freight-train was creeping at a snail's pace up one of the steepest grades in New England. Into the powerful lenses came the vision of a man on horseback by the side of the railroad-track. The man dismounted, gave his horse a gentle cut with the whip, and swung himself upon the rear platform of the caboose, where when I last saw him he was dealing out fragrant Havanas to an appreciative train-crew. I knew that in a few moments they would reach the summit of the road, alter which their progress toward the great city would be rapid.

The subsequent search of the surrounding country failed to locate Professor Davy. A close watch of every passenger-train was no more successful.

I now began to realize that the outlook for myself was a melancholy one. With my employer gone, no one knew where I should lose at the close of the year what to me was a very lucrative position. My wife said she had never seen me look so "blue." I had certainly become very low-spirited, when I received a letter from Judge Maynard. Stripped of its date and all formality, the kernel of the note was precisely this:

"Please call at my New York office (and learn something to your advantage) at your earliest possible convenience."

What could be coming? I had never been to New York. I would improve this opportunity to call upon my brother Joseph, an electrical expert, who had



offices there, and whom I had not seen in years. In the hurry of preparation I did not forget to take some small specimens of rock from the Wilderness.

"I congratulate you," were Judge Maynard's first words when I was comfortably seated in his office; then, as if reading a question in my face, he added, "You may never see Professor Davy again."

"Am I to be congratulated on losing the most generous employer I ever had?" I asked, in some surprise.

"Under the circumstances, yes," he replied, with a look which puzzled me; "but I did get the cart before the horse, didn't I?"

"I knew he left under a cloud," I ventured.

"Professor Davy had no connection with the famous Chicago bank-robbery. He sold a quantity of 'noxite' to a Chicago party, who immediately used it for the purpose of robbery, and cast suspicion upon the Professor. The latter has large interests abroad which would suffer from his forcible detention here," continued the Judge.

"I don't see how he got away, with every ocean-liner watched," I said, secretly wondering where I was to be benefited by the changed conditions.

"The Atlantic liners," said the Judge, with an amused smile, "were watched much more carefully than a certain foreign man-of-war which lay at anchor here for weeks. The Professor appreciates the fact that you could have pocketed what to you would have been a fortune for betraying him, and he has deeded the entire Wilderness, for which he has no further use, to you and your excellent wife in fee simple. Here are the papers. All you have to do is to record them. He hopes, as I do, that when the new railroad makes this rich timber-supply available it will afford you a competence."

My cheeks burned during this recital, and I was glad to escape from the Judge's office. I sent a telegram to my wife, and then hunted up my brother, whom I found in the twentieth story of one of the metropolitan sky-scrapers, glad to see me, of course, but so full of the merits of a new electrical process which he had just invented and patented that he could talk of nothing else.

"By my process," he said, "I can obtain aluminum from cryolite at only half the cost by which Hall's process obtains it from bauxite. There is no cloud upon my patent, as my process infringes upon no other. The only drawback is that one must go so far for the cryolite. Even the Colorado deposits are small. The bulk of it comes from Greenland. But aluminum, or aluminium, as it is sometimes called, is the metal of the future, and I hold the key to its cheap production."

"If I only had an inexhaustible bed of cryolite up in the country to put in partnership with your process—" I began.

"We'd both be millionaires in ten years!" he exclaimed.

I fished out the specimens from my traveling-bag.

"Where can you get such cryolite as that?" he asked.

"On my own land," I replied.

"How much of it?"

"I don't know, but I doubt whether you and I will ever exhaust it."

Brother Joe was right. If we are not yet millionaires, there is imminent danger that we shall become such. Better than that, however, Olive is home again, with apparently no trace of disease, and as a consequence my wife appears ten years younger. From Judge Maynard, who knew how much I wished to learn the fate of my benefactor, I recently received the following clipping:

"A whole Russian army-division was saved from annihilation by the use of 'noxite,' the invention of an American chemist. The Russians, in a deep valley, were surprised by a horde of Chinese Chunchuses outnumbering them twenty-five to one, surrounding them on three sides. On the fourth side flowed a rapid river, difficult to cross. A number of shells containing 'noxite' were exploded among the advancing Celestials, with the result that it produced a darkness of sufficient intensity and duration to completely bewilder them and give the Russians ample time to retire across the river in good order.

"The American, whose correct name is withheld, is known to the Russians as Count Kokopoko, and is described as the handsomest man in the empire, with black hair and beard, black eyes, which seem to look through you, and a most wonderful forehead. He is immensely wealthy, holds a high commission in the Russian army, and has married a Russian lady of high family."

#### A Grand Opportunity

to see the great St. Louis World's Fair without costing you a cent. Address FARM AND FIRESIDE for particulars.

#### His Moment of Triumph

BY MAY C. RINGWALT

"The Lord knows that I never wished Mandy ill," said Mrs. Lind, in her thin, plaintive voice, "but her chickens are coming home to roost for sure." She drew the little shawl closer about her shoulders as she stood beside the wagon, shivering in the chill of the early morning air.

Stephen gave a laugh. "They generally do come home—with a little shooing."

He was kneeling in the bottom of the wagon, pushing aside a box of butter to make room under the seat for the basket of eggs that his mother had handed up, and she could not see his face; but her eyes peered at his back, as if they hoped to find an answer there to satisfy their questioning gaze. "You say queer things sometimes, Steve," she querulously complained.

He rose, put on his coat, swung around to the driver's place, and unwound his lines, which were wrapped about the whip. "Well," said he, "I guess I'm off."

Mrs. Lind stepped back from patting the white mare's nose. "Do you think," she asked, with an apologetic cough, "that Johnson will foreclose on them?"

Again Stephen laughed. "I calculate he will!" He flapped the reins. "Good-by. A new wringer is all you want? I won't be home till late," he called over his shoulder.

His mother stood waving her apron, as she had waved after him years ago, when he was a little boy riding away to the east pasture in the old hay-wagon. The trees, with their crowding branches, swept the vision of the man from her sight, but the picture of the little boy remained. "He never went alone, though," she thought, sighing. "Mandy always got over in time to go along. I can see them just as plain—Steve in his blue-jean shirt and little overalls, with his big straw hat on the back of his curly head, and Mandy in her white sun-bonnet and pink frock, sitting hand in hand on the back of the wagon, their bare feet dangling down." She turned, and slowly walked up the flagged path leading to the kitchen door. "And Mandy went and spoilt his life," she murmured. "Folks may say he's got over it, but you can't fool mothers."

Along the country road the farm-wagon, a pioneer in the day's traffic, blazed its trail of dust. Stephen's feet shuffled against the dash-board, and his hands nervously fingered the lines. During the slow, dull years he had been waiting and plotting for this moment of triumph. When love fails, there still remains a zest in life—a man may hate. Before their whole gossiping world Mandy had put him to shame and ridicule. It was his turn at last. When she was homeless, with only a shiftless husband to stand between starvation and herself and babies, perhaps she would look with envious eyes upon the prosperous man whom she had jilted. For now that the crash had come he would step out from behind the machine, and let Mandy know that Johnson was a mere go-between—that the borrowed money that her husband's folly and mismanagement had wasted had been earned and saved by the labor and thrift of Stephen Lind!

"Whoa! Whoa, there, Molly!" He sat up very straight, his eyes turned to the left of the road. Through an opening among the trees he could catch a glimpse of a tumbled-down fence, a dilapidated house, and beyond a fair stretch of fields. It was their farm—his farm to-morrow. With a low chuckle, he drove on, planning the improvements that he would make, the color that he would paint the house; calculating, in a rising scale, the price that the property would eventually bring. There was a jerk upon the lines—the mare had shied. Along the roadside grew clumps of alder-bushes, their dull white bloom like dust thickly settled in spots among the green leaves. No wind stirred, but the violent swaying of an alder a few feet ahead had startled the horse. Some unseen object was tugging at a withheld blossom. The next instant a little boy, his arms crowded with flowers, toddled out from his hiding-place, and laughing, streaked across the road directly in front of the farm-wagon. A woman with a baby in her arms sprang from the other side, snatched hold of the child's shoulder, and pulled him into a wailing safety as the wagon rattled past. Stephen looked back. The woman, with the baby in her arms and the youngster clutching her skirt, was wearily trudging on behind. Involuntarily he drew up. "Wouldn't you like a lift?" he called to her.

Out from the cloud of dust, with hurrying steps, the woman caught up with the awaiting wagon. Her head was bent as she crooned over the awakened baby, but the youngster's upturned face, still splashed with tears, shone with a sun-burst of smiles.

"Hurry, mother," he shouted, one small foot already upon a spoke of the wheel; "we're going riding!"

The lines in his left hand, Stephen stooped over the side of the wagon, and in a single sweep his curved right arm, with the swift ease of a scythe garnering meadow-grass, cleared the ground of the astonished urchin.

"Gee!" he gasped, with breathless admiration, as he wriggled onto the seat, "if Samson had known you, I guess he'd have gone way back and sat down!"

The hard line of Stephen's mouth slowly softened into a grin of amusement. "If you'll give me the kid," he said to the woman, with an impulse to be kind, "you can climb up easier."

The baby in his unaccustomed arms, he hastily crossed his legs, and in awkward tenderness tried to balance the bundle upon a humped-up knee. The infant vociferously screamed, and bent his back inward, stiffening small shoulders and little legs until the panic-stricken Stephen expected the strained bow of the wee spinal cord to snap in two.

"Thank you so much," said a low voice at his elbow. "Come to mother, pet."

With eager relief Stephen turned to the rescuing comfort of the mother-hands, then suddenly a scarlet flush crept up his tanned face, deepening into an ugly crimson, while a dangerous light leaped into his eyes. The woman on the seat beside him was Mandy.

"It's real clever of you to take us in," she faltered, with a catch of embarrassment in her voice.

It was evident that she supposed Stephen had recognized her from the beginning, and in spite of a fierce resentment against the trick that chance had played upon him, something kept him from an explanation. Without answering her, he took the whip, and sharply touched the mare. The horse sprang forward, the wagon swinging from side to side. Mandy's trembling hand laid upon his arm sent a strange thrill through his entire being. The horse fell into her jog-trot again. The hand was instantly withdrawn.

"I don't know what ails me lately," apologized Mandy. "I'm that nervous!"

Stephen leaned over the back of the seat, and tossed an empty sack upon the floor of the wagon at his feet. "Sit there, sonny," he said, gruffly. "You tire your ma leaning against her that way."

"I'm going to drive!" exultantly announced the youngster, sliding down upon the sack. "I got two horses! Gee up, Charlie! Go 'long, Tom!" He whipped Stephen's boots with his one remaining alder-blossom. "See my lines?" he laughed, tugging at the knot in Lind's shoe-strings.

"Stephen!" remonstrated his mother. Lind gave a start. Mandy became wholly engrossed in her baby.

"I—I wanted him to have the name of a good strong man to grow up to," she stammered, finally.

Stephen Lind turned away his head. The hard line of his mouth twitched. "Are you going all the way to town?" he inconsequently asked, speaking to her for the first time since he had discovered her identity.

"Yes," answered Mandy.

"He oughtn't to let you walk so far—with the babies, too!" exclaimed Stephen, wrathfully.

"You mustn't blame Jim," eagerly protested Mandy. "He doesn't know anything about it." She forced a little laugh. "We ran away. I had to get there somehow," she continued, nervously. "Jim's gone to haul wood for Frazer, so I hadn't a horse to hitch up. Writing wouldn't do any good; besides, to-day is the last day. It's business," she concluded, in a low, distressed tone. "What kind of business?" Stephen heard his own strained voice as if some one else were speaking.

"About the mortgage on our farm. If Johnson forecloses to-morrow, we're ruined. Do you know Johnson?" she asked, tremulously. "They say he's such a hard man. But he couldn't be as hard as that, could he—to turn us out of doors?"

Stephen's gaze was riveted upon his lines. "That's just like a woman's way of looking at things," he muttered. "A man's hard because he takes what belongs to him—what sweating toil and grinding self-denial has given him a right to! It isn't the man that forecloses who turns you out—it's him that ran you into debt; him that—"

"Him that is my husband, Stephen Lind," she interrupted, with a proud dignity.

"I didn't mean to hurt your feelings," Stephen mumbled, after an uncomfortable pause. "You wasn't just, though, to—to Johnson."

"I want to be just," said Mandy, plaintively. "But I—Jim and I aren't intending to cheat Johnson out of a penny. All we want from him is a little time. We're going to pay him back—every cent of interest and principal—or die trying." Whatever mistrust lurked in the

secret shadows of her heart, in her sweet boasting, the loyalty that outlives love bound her husband's sense of honor, his resolution for a brave fight against all odds, to her own high standard. "If we can only keep the farm, we can get on our feet again. I know it; I feel it! I've such plans! You see, I work things out at nights when I can't sleep. I've been a hindrance—a drag on Jim. There's been the babies, and then I've had so many sick spells. But I'm well and strong now."

Stephen looked into her face—pale, haggard, hollow-cheeked, deeply lined with care and worry; and in the vividness of treasured memory he saw her as she had haunted his thoughts all these bitter months—in the flush-rose prettiness of young happiness, with the coquetry of twinkling dimples and the piquancy of mischief-flashing eyes. The world, in its careless good-nature, might speak of "poor Mandy," as it glibly rehearsed the misfortunes of her ne'er-do-well husband, but only the man who had loved—and hated—her with all his might could understand the heights and the depths of the story mutely told in the broken beauty of that face.

The horse jogged on, the wagon creaked, the fretful baby wailed, the little Stephen gleefully chattered at the big Stephen's feet. In silence the man and the woman were walking toward each other across the years that lay between their souls.

"Mandy," said Stephen, abruptly, "tell me exactly how things stand."

"But, Stephen," she shyly protested, "why should I bother you about all my worries?"

He reverently touched her hand—her left hand with the wedding-ring, that caught the sunshine as the thin, work-worn fingers lay spread protectingly upon the little cap of the baby head pillowed on her right arm. "When we were young ones," said Stephen, huskily, "we always used to pretend that I was your big brother. I don't see any reason why grown-ups can't make-believe as well as children, do you, Mandy?"

The lengthening shadows met, and hid the day in darkness. In the Lind kitchen the supper-table, with its pink checkered cloth, and its white china sprayed with wild roses, was already set, while the important sizzling of frying bacon interrupted the drawl of the tea-kettle. The tall, lanky figure bending over the stove straightened itself with a start. Mrs. Lind, growing astonishment on her face, was intently listening. Above the spluttering in the pan came the sound of a whistle—clear, sweet and strong. Unmistakably it was Stephen; but Stephen had not come home whistling since Mandy—Mrs. Lind hastily stooped at the oven, and peeped in at the rich brown gathering upon the risen tops of her biscuits. The whistling ceased, but there were footsteps along the flagged path, upon the kitchen porch.

"Here you be!" As she turned toward the opening door her voice clumsily attempted its usual matter-of-fact tone. "For the land's sake, Steve, what have you got there?"

He stealthily dropped a large bundle on a chair as he strode over to the kitchen table and put down a heavy package. "It's your wringer, ma."

She stood at his side, as eager as a child about to receive a new toy. He got out his penknife deliberately, and cut the twine. The wrapping-paper crackled down upon the floor.

"Why, Steve," gasped Mrs. Lind, "it isn't like my old wringer. It's one of them kind that Sallie Davis was boasting of! But she said they was terrible expensive," she added, in an awed whisper. "They're a sight easier to handle, though. Women-folks ought to be saved all they can—they have to work hard enough anyhow. I'll show you all its little wrinkles after supper—Peters explained them to me himself."

The questioning gaze that the puzzle of life had made a habit with her these last baffling years was fixed upon her son, but there was a light in the old eyes now that they had not had when they peered at Stephen in the morning. "I calculate you're powerful hungry," she said, excitedly, bustling over her preparations to fry his eggs. "Steve!" she cried, suddenly spying the bundle on her chair, "what's this here?"

He looked down sheepishly. "It's just some calico I bought you. I saw it at Peters', and it kind of took my fancy. It's got little clusters of lilacs over it, you know, and I always thought lavender became you mighty well."

She stood speechless, the bundle hugged in both arms, a red spot burning each thin cheek.

"I haven't put up Molly yet," stammered Stephen. He hurried across the room to the kitchen door, but with the knob in his hand he paused a moment. "You was asking this morning about Mandy. I—I ran across Johnson in town. He isn't going to foreclose."



## Note

A. C. N., Missouri. You had better write an attorney at Tribune, Kan. Wm. Glenn and Geo. L. Reid are attorneys there.

## Inheritance by Half-Brothers

B. C. C., Massachusetts, asks: "If a man dies, leaving a child by first wife, one by second wife, and gains his property while living with second wife, with her help, how should the property be divided? Does the first wife's child come in for a share of it?"

I should think if the property is in the husband's name, the children would share equally.

## Deed in Wrong Name

"A man named Smith named his son William Henry Smith. Afterward, to distinguish the son from another man named William Smith, he is known by his middle name, Henry. A tract of land is deeded him, and his name in the deed is written Henry W. Smith. The deed is on record and can't be changed. Is it a good deed?"

Yes, the deed is good.

## Collection of Wages

T. H. Mc., Texas, asks: "Please let me know how to get five dollars which is due me for work on a farm. The farmer won't pay it. He owns ponies, a wagon, house and lot, farm implements, etc."

The only way you can get your wages is to sue for them. A good many states have laws that there are no exemptions as to claims for wages. If your state has such a law, you can get a judgment, and then levy on the ponies, etc.

## Inheritance

A. C. F., Ohio, asks: "What are the laws of Ohio in a case where a man died childless and left inherited property? The wife made a will before the settlement of the estate, in which she willed two thirds of the property to a woman and the woman's daughter, whom they had raised. The woman and daughter are no blood relations. Is that will valid? What part of the property can the wife claim?"

If the man inherited the property, then the wife would have only a life estate in it, and at her death it would go to the ancestor from whom the estate came. If the man bought the property, no matter where he got the money, the wife at his death, if there were no children, would get all, and could do with it as she might choose.

## Barbed Wire on Line Fence

T. F. S., Ohio, inquires: "A. and B. have farms adjoining each other, and both have to keep up one half of the line fence. Can A. build all barbed wire on his half of the fence? Does he have to consult B. before building all or part of barbed wire? Can B. make A. take out any kind of a fence that A. has a mind to build, without seeing if both parties are satisfied with the fence that A. builds? Can A. put barbed wire on top of his fence, or does he have to notify B. before putting it on?"

A barbed-wire fence cannot be built on a line without the written consent of the parties. There is no limit to the other kind of fence that may be built. Neither can a willow or hedge line fence be built without consent. Barbed wire may be used on top of other material if it is not less than forty inches above the ground.

## Failure to Perform Agreement

O. F., Nebraska, says: "About fifteen years ago my mother married a man. At that time she owned considerable personal property, and she afterward sold personal property and purchased a house and lot in Hastings, Neb. This house and lot were in her name, and five years ago, at her death, the stepfather wished to buy out the heirs, one sister and myself being the only heirs. He said he could make only small payments. We fully trusted him, not thinking he meant to be dishonest. He sent my sister twenty dollars and me forty dollars. He was to make a payment each year until it was paid for, and we expected him to continue according to verbal agreement. He married again, and refused to pay us any more. He bought a lot adjoining, and moved the house off my mother's lot without consulting us, and now he has actually sold his lot and my mother's house, and given the man a life lease on my mother's lot. As we are both living so far away we have just learned what he has done. Now, what are the laws of Nebraska in this case, and what course would you advise me to pursue to get our rights, and what can we do with him?"

About the only thing I can tell you to do is to consult an attorney at Hastings, Neb. Tibbetts Bros. are responsible attorneys there. You made a mistake by not requiring security for your payments. The law cannot relieve you of your own folly.

## The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

## Working on a Legal Holiday

H., Texas, asks: "Is there a penalty for laboring in a field on a legal holiday, such as Fourth of July and Thanksgiving Day?"

I understand there is no penalty for laboring on such days—at least, such is the usual and general rule. There is a penalty for laboring on Sunday.

## Marriage Annulled

D. F., New York, asks: "D. married J., who left him. D. wants the marriage annulled. J. has a living husband, but D. cannot find him. D. wants to deed land to F. C. How is D. to proceed? If first husband's friends swear he is living, will the court annul the marriage?"

Apply to the court for a divorce. If J. had a husband living when married to D., there will be no trouble in getting the marriage annulled.

## Right to Patent Article

M. C. S., Pennsylvania, asks: "If I invent an article, and another man sees the invention, can he get it patented in his own name? If so, what steps would I take to recover the patent? I am the inventor. I wrote to Washington to his attorney, but could get no satisfaction whether or not he has got the patent."

In order to get a patent the person must be the original inventor. No one else can have it patented. You had better write some other patent attorney. Staley & Bowman, Springfield, Ohio, are reliable patent attorneys.

## Land Patent Never Issued

I., Kentucky, asks: "About thirty years ago A. laid a warrant on some land, and after some years sold three hundred acres to C. and gave him a general warranty deed. C. sold it to D., giving him the same kind of deed. D. sold sixty acres to E., giving him a warranty deed. E. built on the sixty acres, and lived there twelve years, and recently found out that it never was patented—just warranted, and the warrant was lost."

If E. will now make an affidavit that he now owns certain land, and send it to the land commissioner's office at Washington, D. C., a patent will be issued. Better first write to the commissioner, giving exact description of the land, and ask the fee for issuing the patent.

## Effect of Deeds Delivered

"A. has three heirs, and divided his real estate among them. He also made a deed to each one, to take effect at his death, holding the deeds himself until that time. A. got sick, and thought he couldn't recover, and gave each one his deed, which they have recorded, but not transferred. A. got well. Can A. order timber off one heir's land to improve the land of the other heirs?"

It seems to me that unless the deed contains some reservation that A. has lost all control over the land. Of course, it is barely possible he might go into court and have the deeds set aside. In a case of this kind the children and parent ought to come to some mutual understanding, and as the children are the recipients of the father's favors, they ought to abide by his desires.

## Right to Will Property

N. F. T., Massachusetts, inquires: "A man died, leaving a widow and no children. He made no will. The widow took the personal property, but for some reason never had the real estate made into her name. The estate was inherited. She made a will, giving away the personal property and dividing the real estate between five of his heirs, leaving out one who was dead, but had left two children. The widow died two years ago, and it seems neither the administratrix nor the lawyer could settle the estate. A petition was sent before a probate court, asking that the estate be made over to the widow, so that it can be settled by the will, and that certain people who bought real estate sold by her be allowed to hold their property. Had she any right to sell the land? Is there any chance for the heirs that have been left out in the will?"

If the man owned the real estate, I do not understand what right the widow had to will it or deed it away. Her will would be good as to the personal property, but not as to the real property unless she held it in her own right. The matter is too complicated to be satisfactorily answered in these columns. Consult a local attorney.

## Line Fence Around Church

J. S., Ohio, asks: "When a man who owns land adjoining a church lot wants said lot fenced, who should do it, the church society or the farmer? Also when it is a school lot?"

Unless the church society throws its lot out in the commons it must build one half of the fence. In reference to school-houses the law is not so clear. Section 3987, "Revised Statutes," says that the board of education shall build and keep in good repair all fences inclosing such school-houses. This would imply that the ordinary rule of adjoining landowners would not apply.

## Inheritance

W. C. G., Iowa, asks: "An old gentleman in the state of Iowa died, and left an estate worth several thousand dollars. He was never married. He had eight brothers and sisters. Three of his sisters and a brother were of the same father and mother, but the other brothers and sisters had the same father, but not the same mother. The old gentleman was the child of the first wife. Do all eight inherit, or only the three?"

The inquiry does not state whether the estate was real or personal property, and the laws at my command are not complete enough to give a satisfactory answer. Get the name of some attorney in Iowa, and ask him the question.

## Inheritance-Tax

C. H. H., Iowa, asks: "Do you think a collateral-inheritance tax is constitutional? Also, if a father dies with or without a will, all members of the family who are entitled to the estate are direct heirs, and all others are collateral. Is this a correct version of the general collateral tax?"

Yes, collateral-inheritance taxes are generally held to be constitutional. The law generally defines what will constitute a collateral person. In your state it is any person other than the father, mother, husband, wife, lineal descendant, adopted child, the lineal descendant of an adopted child, or to or for charitable, educational or religious societies or institutions within the state.

## Settlement of Estate

H. H. B., New York, asks: "In case a man dies, leaving all of his estate to his wife during her natural life, (1) When she dies, how long after her death has the executor of the estate given him by law to settle the estate? (2) Can the executor sell the estate and give a deed for it? (3) Can an heir sell his claim or share of the estate before division of the estate? (4) Must the estate be appraised before it is sold or divided? (5) Can the estate be divided, and each heir take his share without the estate being sold? (6) Must the estate be sold for cash if sold at all?"

(1) A reasonable time within the control of the surrogate court. It should be as soon as it can be properly done. (2) Yes, if the will so authorizes. (3) He can assign his interest. (4) The estate need not be appraised unless the will so provides, unless sold by order of court. (5) Yes, if all agree. (6) If sold by order of court, the court will fix the time. If under the will, then the will will control. Consult a local attorney.

## Inheritance

W. S. H., Ohio, inquires: "A man possessed of a farm and other property died. He left a wife and five children—two sons and three daughters. They all lived on the farm until the oldest daughter was married. She sold her interest in the estate, except her interest in the widow's dower, to her oldest brother. The other brother bought the shares of the other sisters. The two brothers divided the farm; one had two shares and the other three shares. After the division the widow lived with her children, mostly with the younger son. The widow died, and also the oldest son. He willed his property to his wife until his children—four in number—became of age. Now, what interest has the oldest daughter, as it was included in the older brother's share, and he considered a portion hers when alive? The estate was never administered. There may have been an order from the court to divide. The deed on record says her share except the widow's dower."

The probability is that the eldest daughter sold all her interest. The widow's dower was only a life estate, the rest of the land belonged to the heirs. I think the daughter has no interest.

## Right to Inherit Property from Wife's Parents

H., Missouri, asks: "A woman died in Missouri while her parents were both living, and left a husband and child. The child died soon after its mother. Can the husband claim his wife's share of her parents' estate at their death?"

No.

## Subscription to Paper

C. L. C., Ohio, asks: "In October, 1902, I subscribed for a weekly paper for one year. My time expired October, 1903. They stopped sending the paper at the expiration of the year, but in about a month they started it again. Do I have to notify them to stop the paper? Can they collect from me?"

No, you need not notify them. They cannot collect anything from you.

## Trespassing on Farm

A. S. says: "I own a farm of fifty acres, with a road running diagonally across it. Some of my neighbors and others persist in walking across my land, cutting across on either side of the public road after going through my barnyard. Is not this trespassing? What must I do to stop it? The farm is nearly all fenced."

Notify the parties to cease crossing your farm. If they do not heed, have them arrested.

## Property Passing by Will

E. E. S., Illinois, asks: "If a woman died and willed the bulk of her property to one daughter and her heirs, can the daughter, having no heirs, will that property to whom she pleases, or will it go to her brother and sisters and their heirs?"

The words "her heirs" are not words of limitation, but merely mean the estate conveyed, and when the words appear in a deed or will they mean that the entire estate passes. Consequently, in the above case the entire interest in the property willed to the daughter becomes hers, and she can do with it as she chooses.

## Right of Wife to Convey Real Estate

E. G. B. wants to know: "A married woman living in Cincinnati was abandoned by her husband about five years ago without sufficient cause for a divorce. The husband was ordered by the court to support the wife and their three children, which he did by paying them a weekly allowance until about three months ago, when he skipped the city, and has not been heard of since. Can his wife sell and legally convey her interest in real estate in Indiana which she inherited from her parents, without the signature of her renegade husband?"

Not without some court procedure. Better get a divorce. If you cannot do that, consult an attorney in Indiana.

## Damage by Runaway Team

A. C., Virginia, puts this question: "A. lets his team break away from him on the public road and run into B's vehicle, overturning the buggy, throwing out the occupants and breaking the buggy to pieces. Can B. recover damages?"

The question whether B. can recover anything or not will depend upon the fact whether or not A. was guilty of negligence. If by the exercise of ordinary care—that is, that degree of care that a reasonable and prudent man would use—and the team ran away, A. would not be liable. If A. used harness that a reasonably prudent man would consider unsafe, and by that means the team ran away, he would be liable. If a man's team is spirited he must manage them accordingly. Harness that will do for a gentle and quiet team might be very unsafe and dangerous for a spirited team.

## Homestead Claim

T. W. F., Oklahoma, asks: "A man filed on a homestead under the United States laws May 25, 1898. He established a permanent residence thereon within six months, and lived on the place until the eighth of December of that year. He then moved to a neighboring farm, and lived there until the eighth of May, 1899. He then moved back to his own farm, and has lived thereon ever since. He made improvements of various kinds on the place while he was not living on it. His claim has never been contested, and is not likely to be. Now, I wish to know if the fact of his not leaving any household furniture on the claim during the time he was renting will be any bar to making proof on his claim?"

The law requires that the homestead party must actually inhabit the land and make it the home of himself and family, as well as improve and cultivate it. If the claimant remained in actual possession, and lived only a few months elsewhere, and has lived there continually for five years, and no other claimant asserts any claim, I should think the party could make proof of his claim.



## Wit and Humor

### Mrs. Dorking's Garden-Party

Mrs. DORKING received her guests near the grape-arbor. It was delightfully cool and shady there, while the grape-blossoms overhead made fragrant the summer air, and the Locust Orchestra, stationed back of the tiger-lilies, rendered choice music.

Mrs. Dorking was in a very agreeable frame of mind, for she had succeeded in settling her children for life. She was happy to say she was not so domestic as Mrs. Dominick, whose children were always tagging at her heels. Her children had gone to the city, and were stopping at one of the largest hotels, and she was now free to dispose of her time as she chose and have a good time, even if it did look rather heartless to be giving an entertainment so soon after the late Mr. Dorking's demise—for he had choked to death only a few weeks previous. Her friends were uncharitable enough to say that his wife's bad cooking had been the death of him—for how could such a gadabout be a good house-keeper?

Mrs. Shang-High was helping her friend receive, looking more vulgar than usual in her dowdy gown; and having heard that a dust-bath was good for the complexion, she had scooped out a bathtub in the veranda-bed, and had been indulging in her favorite pastime all forenoon. As a consequence she was warm and blowzy-looking, and not being accustomed to such elegant society, was ill at ease, and moved about so much that she stepped on poor Mrs. Dorking's pet corn.

The Dorkings and Shang-Highs were considered rather vulgar, but by "hook or crook" had managed to gain an entrance into society, and on this occasion the grand dames came more out of curiosity to see how they would disport themselves at their first garden-party than from any motives of friendship.

As it was early, Mrs. Dorking and her friend indulged in some comments as to the respective merits or beauty of the invited guests.

"I should think," said Mrs. Dorking, "that Mrs. Buff Cochin would be tired to death of those everlasting buff China silks she affects; besides, she is so big and ungainly."

Mrs. Shang-High craned her long neck to obtain a better view of some newcomers, and exclaimed, "It is Mr. and Mrs. Wyandotte! What a handsome couple, and what a beautiful black-and-white foulard silk she has on!"

"Yes, indeed," said Mrs. Dorking. "They are worth cultivating, being descended from the Wyandotte Indians."

Just then that good but plain Mrs. Dominick came in sight, with all the young Dominicks dressed in gray, and as old Mother White said, "If they weren't twins, they ought to be." To be sure, they

"There they are now," announced Mrs. Dorking, as the couple came along the garden walk, carrying themselves as became descendants of that great Spanish grandee. Mr. Black Spanish, very handsome and graceful, was clothed in the glossiest of black broadcloth and the finest of linen, while his wife, a lovely young brunette, wore a black satin gown, big picture-hat and pearl ear-rings that were the envy and admiration of all the ladies of her set. She was a very proud young beauty, and very exclusive, hold-



THE PREVAILING CRAZE

"Say, missus, don't yer give no tradin'-stamps wid dis hand-out?"

ing herself aloof from such common, ill-bred people as the Shang-Highs and Dorkings, and she merely bowed in acknowledgment of Mrs. Shang-High's very noisy greeting.

As for Mrs. Dorking, she was busily engaged in watching the majestic Mrs. Barred Plymouth Rock, who, while trying to impress all beholders with the fact that her ancestors came over in the "Mayflower," neglected to look where she was walking, and caught one of her feet in a protruding vine, almost falling on her face. It sadly disarranged her handsome gray-and-white costume, and nearly dislocated her ankle; but, although greatly mortified, she planted her large feet down firmly, and looking as coldly as though attending a Boston symphony concert, proceeded on her way without deigning to glance at her distant relative, Mrs. Dominick, whose young hopefuls peeped out affrighted at her from the ample shelter of their mother's skirts, while Mrs. Dorking nearly smothered, and spoiled a costly cobweb handkerchief in her efforts to keep from laughing at her Boston friend's mishap, for she had grown tired of being snubbed by Mrs. Barred Plymouth Rock because of her lack of culture.

But other guests were arriving, and among them Mr. and Mrs. Brown Leghorn. The ladies exclaimed, with one accord, "Oh, what a handsome man to have such a plain little wife!" In truth, he was the pampered "Beau Brummel" of their little circle, and a desperate flirt.

"How well Mrs. Brown Leghorn is looking," said Mrs. Shang-High.

"Yes, indeed," said kindly Mrs. Dominick. "I like those snug-fitting tailor-made gowns of hers, and her dainty little toques with red Alsatian bows."

"Good gracious!" said Mrs. Dorking. "I hope you don't admire her old-fashioned bell-skirts, with no up-to-date jacket, shirt-waists, or anything like any one else is wearing. Why, she's worn that same old cheviot dress and bonnet for the last ten years. I should think she would roast in them on a day like this. I believe she is too stingy to buy a decent hat or gown. I would rather be out of the world than out of the fashion."

"My dear," remarked Mrs. Dominick, "maybe she could have more dresses and hats if that husband of hers did not spend all the money on his own pleasures."

Just then that old Irish gossip, Mrs. Topnot White, sauntered along, and with her was Mrs. Black, in her cheap, dusty black raiment. She had lately lost thirteen little Blacks, taken away in early

childhood by that insidious foe, the gapes; and as old Mrs. White remarked, "What more could she expect? Thirteen always was an unlucky number." And Mrs. Brahma, who was standing near by, was an interested listener for one whose thoughts ran to woman's suffrage, clubs and the bloomers costume.

Among the last arrivals was Mr. Game, and he had a generally used-up look. One of his eyes was almost closed, while several patches of court-plaster decorated his face. He was a member of the gymnasium, a noted athlete, and a general favorite in sporting circles, and his admirers were at a loss to decide whether he was a second Fitzsimmons or the champion of the world; but in his own opinion he far outshone them both. Society did not approve of him, but because he was related to the ancient and royal family of Pheasants of England they kindly overlooked his faults, and received him as one of themselves. But Mrs. Shang-High had grown tired of this enforced gentility, and was growing very hungry, so she whispered to Mrs. Dorking to serve the refreshments if it was time. Mrs. Dorking acted upon her suggestion, but the guests very politely refused everything except strawberries, and these they preferred fresh from the vines, so they all, with Mr. Brown Leghorn and Mrs. Black Spanish in the lead, sauntered over to the strawberry-patch. There was some pushing and crowding as to who should have the largest and ripest, and Mrs. Shang-High, with her usual gluttony, grabbed at all in sight, and forgot the courtesy due her guests.

After their impromptu feast they concluded to stroll among the flower-beds on the lawn, where they appeared to be enjoying themselves until Mr. Brown Leghorn very gallantly reached up and picked a ladybug off a rose which Miss White Leghorn was vainly endeavoring to reach. As she was a favorite of Mr. Game, he rather resented Leghorn's gallantry, so quietly pushing the charming young beauty aside, he demanded of Leghorn an explanation. Mr. Brown Leghorn had been wont to boast to his fair admirers that he was a much finer athlete than Mr. Game, and if the opportunity offered would give Game a few lessons in sparring. This coming to the ears of Game, rather nettled him, and he resolved to punish Brown Leghorn, so stepping up to Leghorn he slapped his face, and Brown Leghorn, not having a decanter handy to throw at him—as the late Ward McAlister suggested in case gentlemen were insulted—and not being able to fight according to the Marquis of Queensbury rules, made an unscientific lunge at Game, and then the battle commenced in earnest. The gentlemen applauded and enjoyed the battle, but the tender sensibilities of the ladies were

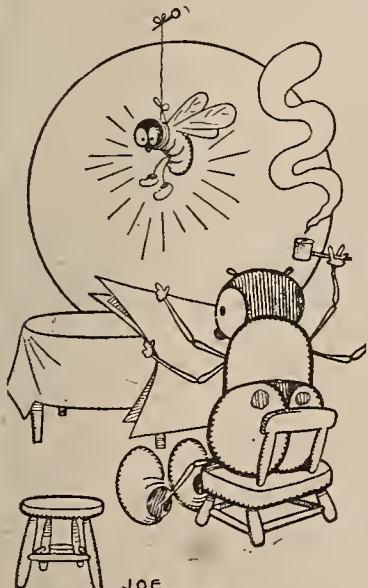


BRIGHT PROSPECTS

"How're the chances of the team this season?" "Fine! We've got a new college pitcher who can cuss at the umpire in seven different languages."

shocked, and they retired to the shelter of "The Rose-bush Club."

Poor Leghorn, not being a fighting man, came out of the fray with his elegant suit torn and dusty, his flaunting red plumes drooping, and blood streaming from his wounds. He beat a hasty retreat into "The Rose-bush Club," where his fair friends tried to console him by promising never to speak to Mr. Game again, and what had promised to be a delightful afternoon had ended in a disgraceful fight. J. B.



JOE HANOVER

ANNOYING

Bug—"Darn that infernal firefly, he's beginning to go out just as I'm getting interested in the paper."

did not ape the latest styles, and were rather ordinary-looking, but for all that were favorites in circles where solid worth was appreciated. Mrs. Dominick came over to where the ladies were receiving, and the usual greetings were exchanged. As she brushed the dust off her youngest daughter's gown, Mrs. Dominick remarked that she had met Mr. and Mrs. Black Spanish on the king's highway, and that Mrs. Black Spanish was lamenting the dust which had settled on her train.

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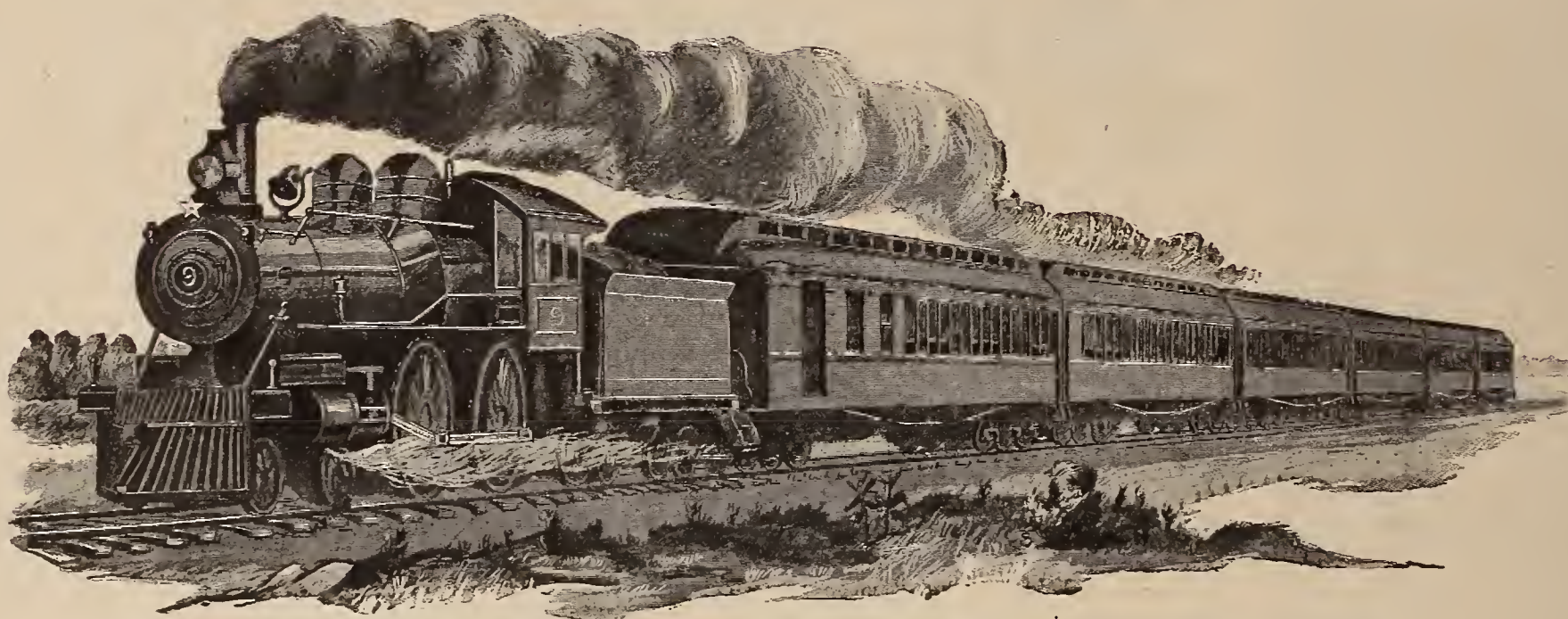
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By R. B. HOUSE, M.D.

### Methods of Banishing Pimples

There are three ways to banish pimples. One is to heal them prematurely, only to have them break out again. To this end cold-creams are used to effect a transitory cure which is far from radical. The second method is the use of astringent lotions, which dry up, but do not drive out the impurities, so that they simply seek another outlet. The third, and only sure and permanent, method is to seek the cause, eradicate it, and drive out the pimples. Better suffer a temporary increase of the evil than to endure intermittent disfiguration for years. The ordinary physician pays but little heed to facial eruptions, unless of a malignant character, yet they often cause greater mental misery than more serious disorders. The pores of an oily skin are simply inert—lazy. They must be stimulated to do their part in eliminating waste matter. If the retained sebum be left in the pores, it hardens, festers, and becomes a pimple. Blackheads are almost the certain precursors of pimples.

### Oatmeal as a Food

When Doctor Johnson in his dictionary said of oats that in England it is fed to horses and in Scotland to men, the reply was made, "Where will you find such horses as those in England, or such men as those in Scotland?" Yet in spite of the popularity which oatmeal has long enjoyed as a food for man and beast, there now arises an English physician who calls it a national curse. Another physician of England says that when a dyspeptic comes to him for treatment he can anticipate his acknowledgment of the fact that oatmeal is eaten frequently, and at once orders him to stop it. A Scotch physician believes that an oatmeal diet causes rickets in children. It is with pain that we view these onslaughts upon a cherished breakfast-food, and we are not yet ready to give it up. While not advocating its use as an exclusive article of diet, we believe it will be hard to find a more palatable, nutritious and wholesome breakfast-food than oatmeal with cream. Though it does not equal meat as a muscle-builder, yet oatmeal has a fairly large percentage of proteid, and the ratio between the nitrogen and carbon it contains is good. When well cooked, and eaten with milk—recognized as almost a perfect food in itself—its food value makes it a breakfast sufficient for most of the avocations of life. We doubt if the many health-foods of the day, which so much resemble combinations of sawdust, excelsior and tan-bark, can offer more dietetic advantages than good old-fashioned oatmeal.


### The Fresh-Water Oyster

The popularity of the pale and fat fresh-water oyster is nowadays being dealt a deadly blow by observing bacteriologists. They tell us that they contain typhoid germs in plenty, absorbed from the contaminated fresh water in which they are submerged for days for fattening. This so-called fattening is really a water-soakage by osmosis, the salty fluids of the bivalve passing out so much slower than the unsalted water enters to take its place that the animal becomes much swollen within a few days, afflicted with a veritable dropsy. Thus these fattened oysters may truly be said to be sickened oysters, ill with dropsy and the harboring of the dreaded and despised germ of typhoid.

When all other means fail to account for typhoid in the person of the man careful to drink only boiled water, the oyster is seized upon to explain the presence of his unwelcome and dangerous visitor. It will next be time for boards of health to place an embargo upon this popular food thus prepared. Whether this will be right or not we are not prepared to say, but according to our taste it would be much better if none but the real, natural, salt-water variety were used. Freshening not only takes away the salt that must again be added, but it also abstracts the iodine and other seawater constituents that have an unknown beneficial effect upon the economy of those who partake of the food. Whatever lesson of value there is in these facts should be taken advantage of by refraining from freshened oysters. The natural product keeps better, tastes better, is better.—The Medical Counselor.

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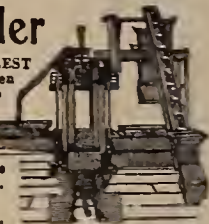
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## Clare Point Stock Farm

By R. D. VON NIEDA

**C**LARE POINT STOCK FARM is situated in a beautiful country just on the outskirts of the historic little city of Ephrata, on the Reading & Columbia Railroad, and about twenty miles southwest of Reading, Pa. The breeding-establishments are remarkable in their every detail, the management being conducted by the owner, Mr. T. A. Wilson.

The farm is in every sense of the word simply a wealthy gentleman's private country home—his castle. Horse-breeding is a loved occupation of the owner, whose sole aim is to benefit breeding-interests, and to produce animals whose beauty and speed will reflect credit on the undertaking and prove the correctness of ideas developed by years of careful study of the results obtained by breeders in the past. Ideas may be obtained from the pictures of some parts of the farm, track and buildings, but they are faint compared with those that are gained from inspection, when the natural beauties and scientific improvements become apparent. The quarter-mile covered track, stables, etc., should be seen to be appreciated.

The half-mile track on the farm is probably the best and most expensive in the United States, it having cost about twenty-five thousand dollars. It was laid out by Mr. Samuel L. Sharp, and constructed by Mr. Seth Griffin. It was a big undertaking; completed, it is a masterpiece. It is what is known as the parabolic oval, which consists of the parabolic curve combined with the true curve and parallel sides. The straight sides are in all 848.50 feet, the four parabolic curves 612 feet, and the two true curves 1,179.50 feet, making 2,640 feet in all. The stretches are sixty feet wide, forty feet of this being in sod twelve inches deep, top-dressed with fine loam. In making the track, forty-four thousand cubic yards of soil and rock were handled, and fifty-four thousand cubic yards were handled in grading and forming the infield. The entire back stretch and upper turn is a fill running from five to fifty feet. The judges' stand is one of the finest ever built. It has walls of stone, the upper part is inclosed in glass, and it is furnished with telephone connections. It is so complete in every way that the design has been sought by prominent track-owners in other parts of the country.

The covered quarter-mile training-track, which cost about twenty thousand dollars, is beyond question the finest of its kind in the world. It is of regulation shape, substantially built, well lighted and thoroughly ventilated. The inside wall is lined with finely furnished box-stalls, some fifty-odd in number, about half of them being twelve by twenty-four feet, the others about ten by fourteen feet. Across the center are harness-rooms, wash-rooms, and sleeping-apartments for the men, while at each end, built in connection, is a two-story cottage for the help.

There are thirty men on the pay-roll, including a

salaried electrician, a perfect electric system being operated. Like all the other features, it is all that science, taste and wealth can make it. It is equipped with a storage system, by which sufficient power can be stored for illuminating purposes for all the buildings, walks, etc., on the farm for three days' use. There is a dynamo run by water-power, and also one by an engine. All the buildings, stables and the grounds have a perfect system of electric-lighting. There is a fine telephone system, with which each and every department is connected.



HALF-MILE TRACK AT CLARE POINT FARM

Neatness and cleanliness are noticeable everywhere; in fact, a lady in evening costume might visit the stables, and leave without the least odor clinging to her clothing. Peat-moss imported from Holland is used exclusively for bedding and on the covered track. There is a man for each three animals, and

pasture-land and a fine running stream of pure spring-water contribute to the natural advantages. It is a place almost beyond comparison in every respect.

Mr. Wilson says that he loves horses, and it is one of his great pleasures in life to be able to gratify that love, and devote some of his time to breeding and developing them along lines that will ultimately bring great results. He says that he has not expended this large sum of money in building these stables, race-track, stocking it with high-priced horses, etc., with any expectation of a money profit; in fact, he knows that it has and will cost him thousands of dollars, the only return expected being the pleasure he takes with his equine friends, the satisfaction to be derived from demonstrating his ideas of breeding, and above all he wishes to quit this life knowing that he left behind him something of practical benefit to guide future horse-breeders in their endeavor to produce the perfect horse, and that his plans and work will make the name Clare Point Stock Farm remembered and cherished for generations to come. This is his sole idea.

His horses and brood-mares, though comparatively few in number, have been selected with the sole object of carrying out his ideas as to the true method of obtaining the results desired. He is convinced that to do this a conglomeration of blood-lines, no matter how meritorious each may be, is wrong. It seems to him, he says, that it is the law of nature that the straighter the lines descend from the sire on one side and the dam on the other, the better; that is, of course, selecting these fountain-heads from the two different blood-lines that, commingled, have proved to be the best. Of course, not all may agree as to which of the various heads are the most to be desired, but it does not matter about that, it is the principle that he wants to demonstrate.

All in all, Clare Point Stock Farm is an instructive and pleasant place to visit. Mr. Wilson has a grand residence in Reading, but most of his time is spent on the farm, where he is always pleased to meet horsemen who can appreciate the surroundings.

### Notes and Comment

As to cotton, the real need of the hour is an increased export trade of manufactured goods.

The director of the viticultural station at Cognac, France, has become fully satisfied that barn-yard manure gives quite as good results as the best quality of commercial fertilizers.

Prof. S. F. Kedzie of the Michigan Agricultural College has been appointed by Governor Bliss a delegate to the International Tuberculosis Congress, which meets in St. Louis, Mo., next October.

The percentage of sugar in sugar-beets has been greatly increased by the careful selection of seed. A few years ago twelve per cent of sugar was the standard. Last year in many cases the entire crop sold to a factory averaged from fifteen to eighteen per cent.

It is not generally known that lime fresh from the kiln is being finely ground for use as a fertilizer. This form of lime can be distributed by means of a drill. The Ohio Experiment Station has made a test of this method of using it, and reports respecting the value of lime in this form are of the most satisfactory character. \*



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that is about his sole care. Mr. Wilson is particularly fortunate in having as superintendent Dr. T. W. McDermott, a practical horseman and trainer, a veterinary surgeon, and also an intelligent shoer. Under him is a corps of sober, reliable young men. Splendid



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## About Rural Affairs

By T. GREINER

**W** E OLD PEOPLE may not hear very much that is new to us at the institute and other farmers' gatherings, but I have never yet attended one without learning something or getting some idea of value; which shows that nobody knows it all.

By ASKING AN EXPERT in such matters, you may learn the principles and fundamentals on which a certain line of your work is based. The application, however, has to be made by yourself in your own individual case. In other words, each soil-tiller has to work out his own local problems. We can't do it for him.

**SPRAYING FARM-TOOLS.**—During the season of use some of the farm-tools—plows, drags, cultivators, garden-drills, etc.—are occasionally left outdoors during the night, or even for days at a time, and therefore exposed to rusting. Quite often, when spraying cattle, horses or poultry with the little hand-sprayer charged with petroleum or kerosene, I also give my farm-tools, as I come across them in the yard, a good spraying to keep them from rusting. The whole treatment requires but a moment's time, and the oil will keep the rain-water or dew from doing harm. It is the easiest way I have found yet for oiling machinery.

As a GARDENER I am not in sympathy with that statement in the oft-mentioned Bulletin No. 22, that "practically all soils contain sufficient plant-food for good crop-yields, that this supply will be indefinitely maintained, and that this actual yield of plants adapted to the soil depends mainly, under favorable climatic conditions, upon the cultural methods and suitable crop-rotation." When I raise lettuce, spinach, cabbage, celery, radishes, etc., I know that I can insure full crops by the lavish use of plant-foods, especially stable manures, and that failure will result in the same measure that I refuse applications of such plant-foods. As a gardener, in short, I am with the chemists rather than with the soil-physiologists.

**SUNFLOWERS KILLED BY BORERS.**—We can grow sunflowers successfully in almost any odd place, even if not perfectly drained, or if not particularly rich. We like to have a few rows of them, for variety's sake and for poultry. A lady in Texas writes me that her sunflowers have been affected by a brown bug which works in the roots, and perforates the stalk next to the ground. I have had no personal acquaintance with his bugship, and can only advise this correspondent, or any one who discovers insects that are unknown to him on any cultivated plant, to forward specimens to the state experiment station or to the Department of Agriculture. The entomologists of these institutions are always ready to investigate the case and give information and advice.

**BANANAS AS FOOD.**—Personally, I am too fond of good bananas to regret seeing our markets so freely supplied with them, although possibly they may come in competition with our own fruit products. There seems to be nothing that fills the bill so completely with my children as a well-ripened banana. Sliced banana goes very well with the various breakfast-foods, and with currant juice or jam it makes a really ideal fruit-combination. I have not had a chance as yet to see or test the banana flour, or the "banannia" said to be manufactured in Cuba from the freshly gathered fruit (no other ingredient of any kind being added) and offered as a new food for infants, invalids

and the aged, or the banana malted food said to be prepared from the finest Jamaica bananas combined with malt, and also advertised as an ideal food for invalids. Probably such foods are good and useful, but like most of our breakfast and cereal foods, the claims of manufacturers for the wonderful healthfulness of their special products must be taken with the proverbial grain of salt.

**WHEN ROGUES FALL OUT.** honest men get their dues. When doctors disagree, and scientists turn their wordy batteries on one another, we laymen begin to see on what shaky foundations most of our alleged exact and recognized scientific knowledge really rests. As a consequence of the publication of that famous Bulletin No. 22 by the Department of Agriculture the agricultural chemists and the soil-physiologists are yet pulling one another's ears with amusing perseverance. Secretary Wilson, in defense of that bulletin, stated at a hearing before the committee on agriculture (House of Representatives) that "we have hardly an agricultural chemist in the world," and that "most of the agricultural chemists never did anything for agriculture worth speaking about." Of course, the chemists do not keep silent, and return in kind, but not very kindly. The best thing, however, is that both sides will go to work more determinedly than ever to try to find out the real truth in the matter, and in this we can only wish them success. After a while we may know "where we are at."

**NEXT POTATO CROP.**—If precedent is followed, we shall probably see a large increase in potato-planting. The prices paid for potatoes during April and May reached a very high figure—in retail up to one dollar and fifty cents a bushel—and the supply is limited. Under such circumstances growers are usually quite willing to plant heavily even if they have to buy seed-potatoes at high rates. Possibly, however, there may be a shortage of seed-potatoes, and surely we cannot plant more than we have or can get. For this country there is hardly ever any chance or prospect that potatoes will be used extensively in the manufacture of starch, alcohol, dextrine, etc. In 1901 Germany grew one hundred and sixty acres of potatoes to every ten thousand inhabitants, against thirty-four and eight tenths acres in the United States, and in the year following the exports of potato flour and starch reached forty-five thousand nine hundred and seventy tons, and that of dextrine fourteen thousand and forty-seven tons. We will hardly care to compete with Germany in those products. Our potatoes, one year with another, pay much better as it is, and the crop seldom fails to be profitable. It will probably pay this year where properly managed. I am doing the usual amount of planting, and expect to spray as I never sprayed before.

**AN OLD POTATO-BUG REMEDY.**—One of the first remedies recommended for the potato-beetle when it made its first appearance in the East was tar-water. A reader in Delaware County, Pennsylvania, writes me as follows: "Your reference to disparene, or arsenate of lead, reminds me of a recipe that I saw in the Philadelphia 'Record' some years ago, and which I recommend to you for trial. I told it to a number of farmers, but they are so wedded to Paris green that I could get but one to try it, and it proved a success. It not only kills or drives the bugs away, but it also kills any fungus that may be about, and it does not injure the potatoes. Take five gallons of coal-tar—procurable at any gas-works—place the same in a water-tight barrel, and pour on it fifty gallons of water. Let it stand twenty-four hours, then dip it out, and sprinkle [or spray] it over the beetle-infested potato-plants. A friend whom I induced to try it told me that it was the best thing he ever tried, as he made but two applications on a five-acre field during the season, and raised the best potatoes he ever had. While the stuff is not very nice to handle, it is not poisonous, and will not hurt a sore hand." This old remedy has been used in its time with very good results, and it may be wise to give it another and more thorough trial. Sometimes we find that these old and once-discarded devices have some qualities which make them desirable, and possibly preferable to some newer methods and devices. If I can get the tar I will again put this remedy to the test.

**FOR FLY-TIME.**—Soon the flies will be at our poor cattle again. While up to this time well cared for, liberally fed and kept in the greatest possible comfort, and therefore doing well in growth or products, our cows and calves now enter a period of comparative suffering—by heat, by dry pasture, and especially by flies. Of all farm creatures, thin-skinned calves are liable to be the greatest sufferers by exposure to flies and the blistering sun. I like to raise my own family cows, usually keeping two, and changing frequently as soon as a new heifer proves her worth. But these Jerseys are very sensitive to fly-attacks. The calves take up but little stable-room, and should be kept in darkened stables during the day, and be let out in a roomy yard or pasture with some shelter during the night. This plan can also be recommended for the cows, but I usually tether them in the pasture or orchard during the day, and keep the flies off by spraying them with some simple fly-repelling preparation, even if nothing else but a mixture of kerosene, oil of tar and crude carbolic acid. I may try crude petroleum in this combination this year. Doctor Moore of the South Dakota Experiment Station finds the following formula effective as a fly-repeller: Fish oil, one hundred parts; oil of tar, fifty parts; crude carbolic acid, one part. This mixture costs about thirty-five cents a gallon, and may be applied with a hand-sprayer. I use the kind that can be bought in any hardware-store, and costs sixty or seventy-five cents. To keep the flies off even to a reasonable extent, which perhaps cannot be done absolutely, I spray at least once a day, and when the flies are very bad even twice a day. Such attention is well repaid by the results. It is estimated that the flies will often abstract a pint of blood from a single animal in a day. How can we expect to have a steer, heifer or calf make much gain in weight, or a cow maintain her flow of milk, under such circumstances? Save the loss!

## Salient Farm Notes

By FRED GRUNDY

**T** HE THINKER IS THE WINNER."—A few days ago I saw a boy harrowing a field for corn. The ground was very rough. He had three horses hitched to the harrow, and a small log weighing about a hundred pounds tied on top of it, and he was walking. It reminded me of the happy days of yore, when I used to do the same thing, trudging back and forth across the field until every bone and muscle ached like bad corns. It also reminded me of a certain occasion when I was a hired man. The farmer I was working for was a first-rate fellow, but he had an exalted opinion of his own methods, and took suggestions from others whom he considered his inferiors with very bad grace. One day I was harrowing, like the boy mentioned, with a small log fastened on the harrow to make it "take hold" better. As I was obliged to lift the harrow up once or twice every round to clear out the trash, it occurred to me that it would be a good idea to throw off the log, lay on a short board, and ride. This would not only save leg-muscle, but also back-muscle in lifting the harrow to clean the teeth. I tendered the suggestion in a modest way, and was told that if I was too lazy to walk a mule would be purchased to carry me. Another of his methods was to throw the manure out of the stable every morning during the week, and on Saturday afternoon load it onto an old sled, draw it direct to the field and spread it. I suggested that it would save time and considerable labor to leave the manure in the stable all the week instead of throwing it out to be scratched about by the hens, and on Saturday draw the sled close to the door, and throw it directly upon the sled. He said he thought I must certainly lie awake at nights contriving plans and methods for avoiding work. About a week later an uncle of his dropped in just at noon. He lived about thirty miles distant, and farmed seven hundred acres of land, and his opinion in matters agricultural was considered in that household as equal to gold. After putting up his horse, I came in, and was introduced as a "natural-born genius for avoiding labor." Then my employer related the harrow and stable incidents. After the laughing was over, the uncle dryly remarked, "If I had a man on my farm who would weight a harrow with a log and walk after it I'd have him examined for lunacy, and if one of my men should move the manure out of the stables to any other place than right onto the field where I want it he would get his discharge before night. Don't you know, Jim, that one rain-storm will wash out a third of the value of stable manure? If it is in the yard, that third is wasted; if it is on the land, that third goes into the soil." After that my "genius for avoiding work" was never referred to.

I once heard a lady speaker at a farmers' institute tell how her mother gave her a little object-lesson that lasted—one that had helped her through many a difficulty. She was a very busy woman, and that day was making pies for the threshers expected the next day. "Mary," she called, "go into the pantry, and get me the cinnamon-can off the third shelf." Little Mary went into the pantry, and found that the third shelf was just beyond her reach. She came out, and said she couldn't reach it. Her mother wrapped her hand in a towel, grasped a chair that stood just outside the pantry, set it close to the shelf, then turned, and giving Mary a little spat, she said, "Now, dunce, get me that cinnamon!" Mary said she often afterward wondered why she never thought of the chair when she found she could not reach the shelf. After that lesson she said she had done hundreds of things that would balk nineteen out of every twenty women. Whenever she found that any one way of accomplishing a certain object was impracticable, she immediately set her wits to work to discover some other plan, and rarely had she failed. If anything connected with her cooking went wrong, she at once set about finding the cause and remedying the evil. "Where most women sit down and cry over what they term their bad luck," said she, "I roll up my sleeves and seek out the cause and a remedy. And I do not consider myself one atom smarter than thousands of other women. I make mistakes—lots of them—but I try to never make the same one twice. One of the greatest steps to success is to do things. If you cannot do them one way, do them another, and you are bound to win."

One of the principal hindrances to success, I find, is the desire to avoid responsibility—the desire to let some one else solve the problems of management. It is much easier to follow the lead, or be guided by some one else and do as directed, than to think and plan and manage for one's self. We have a thousand men and women laborers to one thinker—to one who can successfully plan and manage. The man who thinks for himself will not remain a mere laborer very long. We see him step forth and resolutely grapple with the problems of management, and in a short time he is the owner of a farm or a business of his own, and has that air of independence about him that no mere laborer ever acquires. A little fellow who a few years ago was a farm-hand, but is now the owner of a good forty-acre farm, all paid for except about five hundred dollars, said to the writer, "I tell you, it took some mighty close thinking and working. I didn't have any thoughts for the political situation, nor what my neighbors were doing. My whole mind was centered on how I was going to make the next payment on the mortgage and cut down the interest. When I made the first payment I was paying seven per cent interest. A sharp neighbor told me he would let me have the money for six per cent for one year at a time, renewing the mortgage without cost to me at the end of each year until the debt was paid. I soon learned that his object was to get the farm from me, so I hustled about and found a man who would let me have the money five years straight for five per cent, and when my neighbor informed me that he would have to have his money or foreclose I handed it to him, and told him that 'there's many a slip 'twixt cup and lip.' You see, I kept my thinker going as well as my hands."



## Farm Theory and Practice

**PEAT-LANDS IN THE CORN BELT.**—The value of our experiment stations to the practical farmer is incalculable. I am very sure that we are to have a fine illustration of this fact in the results of some experiments with the peat-lands of Indiana, Illinois and other central states. There are large areas in these states that have been wholly unproductive, although the soil was full of vegetable mold. This land contains enough costly nitrogen to grow crops of corn for scores of years, and it was once thought that drainage would be the only requirement in bringing this land into great productiveness. But the results secured from drainage often were most disappointing. Corn would make a rapid growth for a few weeks, and then it would cease, or would grow to the ordinary height and fail to give a crop of ears. The experiment stations of the states most interested have been studying these areas of land, and find that these soils vary in their formation, but that a big percentage of this land has a soil that lacks only one element of fertility, and that when it is supplied good crops can be obtained.

Potash is the sole need of this class of peaty lands. When potash is supplied, good yields of corn are secured. This fact would have remained generally unknown for a long period of time had it not been for the investigations of scientists. As it is, an immense amount of wealth will be added to these states. Great areas of unproductive and nearly worthless land will have good commercial value.

A stalk of corn must have all the fertility needed to produce itself before it will begin the work of forming a good ear. A light application of potash to this peat-land will give an increased growth of the plants, but may not procure the production of a single ear of grain. The plants must have an abundant supply of potash. How much is this? For the class of peaty swamp-land that has been found to lack only in potash, two hundred pounds of muriate of potash are recommended for the first application. Much more potash will be left stored in the stalks than in the ears. It is therefore wise to leave the stalks on the ground and plow them under. If this is done, one hundred pounds of the muriate is recommended for the second application. Corn may be grown on this land year after year, because it contains big supplies of all other elements of plant-food. After a few years it is quite possible that the annual application of potash may be still further reduced.

The potash should be broadcasted upon the land after it has been plowed. It is a salt, and can be readily sown by hand. Applying two hundred pounds to the acre, the broadcasting is very much like the old way of seeding wheat. The potash is mixed with the soil by the harrow, is quickly dissolved, and is carried by the soil-water throughout the feeding-ground of the plant-roots.

It is true that some classes of peaty swamp-land cannot be brought into a state of productiveness by this treatment, and some experiment by the landowner will be necessary; but the area lacking only potash is so immense that this discovery by our scientists has enormous commercial value.

**GROWING COW-PEAS.**—Many a plant that is new to a section of country is condemned as a failure simply

growths of peas or of anything else, but they could receive great benefit from the peas if the right treatment were given them. The poor soil that will not make a good sod of clover or grass is worth very little indeed. Any crop that will help it to a sod is very valuable. Many years' experience teach me that the Southern pea is especially good in fitting land for sod. The growth of peas may not be large, because the soil is thin and cold, but it can be made sufficient to insure the sod, and that is the great consideration.

Shall the peas be grown and plowed down as a fertilizer? Absolutely no. In preparing land for seeding to grass and clover the essential things are fertility at the surface, moisture, and freedom from weed-seed. The breaking-plow secures none of these things, but just the opposite. What we need to do is to grow a cultivated crop during the summer that will add vegetable matter to the surface, and I know of nothing that fills the bill like the Southern pea.

Plant the peas by the first of June, drilling in rows



FIG. 1—MOWING THE THIRD CROP OF ALFALFA

thirty-two inches apart. This is easily done by stopping all the hoes of an eight-hoe drill except two. With such planting, three to four gallons of seed are sufficient. Give the peas at least three cultivations, preventing weed-growth and the formation of a crust until the plants shade the ground. Assuming that the land is thin, and that the object of the crop is to enrich it for a sod, this growth of peas should be left on the ground. It is important that it should be left near the surface—not buried six or more inches deep with the plow. A good implement to prepare the land for seeding to grain or grass is the disk-harrow. The points that we are watching are that the soil be left firm, so that moisture can rise; that the surface-soil in which the weed-seeds have germinated during the summer should be left at the surface, and that the rich organic matter that is contained in the pea-vines should not be buried.

In August, before the pea-vines become ripe and tough, a double cutting with a sharp disk-harrow will destroy much of the growth, burying it partly in the surface-soil. A float of rough planks also does good. The green vines decay rapidly. Much of the stubble will start another growth of vines, but this does no

harm, as the first heavy frost will kill all the green stuff. In such a seed-bed—rich, clean and able to hold moisture—the conditions are present for getting a sod.

I am not opposing the growing of cow-peas for hay. Such hay has been largely my dependence for winter feed. Neither am I condemning the practice of growing peas to be turned under for a spring crop. This has paid me well. But I do have in mind the great areas of thin and cold land that will not make a luxuriant growth of peas in the North, and that need help in making a sod of clover and grass. Much of this land should have the treatment outlined above.

DAVID.

## Curing and Saving Alfalfa Hay

The three illustrations on this page show the actual work of making the third crop of alfalfa hay by a method that applies perfectly the correct principles of curing hay and saving it from loss in handling.

By a side-delivery attachment to the mower the cut alfalfa is placed in a small, loose windrow, out of the way of the team at the next round, as shown in Fig. 1.

As soon as the outside leaves are well wilted, but before any of them become dry and brittle, the windrows are raked into small bunches, the horse walking between two windrows, as shown in Fig. 2. Careful work in making the bunches will fold the partially cured hay, and turn part of the uncured hay at the bottom of the windrow on top of the bunch.

As soon as the outside leaves of these small bunches are well wilted, the bunches are carefully upset with the rake, as shown in Fig. 3, turning on top of the bunch that part of the bottom of the original windrow left untouched at the first raking. When this top is nicely cured, the hay is ready for the barn.

## SOME ADVANTAGES OF THE PLAN

From first to last the hay, not being trampled by the horses or run over by the mower, is kept in a loose condition, so that the air can pass through it and evaporate the water from the cut plants through the wilting leaves.

The bunching is done by horse-power and sulky-rake instead of hand-power and pitchfork. Time and labor are saved.

In curing, the hay gets loosely matted, and hangs together nicely in good forkfuls, so that there are no gleanings to gather up when the bunches are pitched onto the wagon, saving time in loading.

The leaves, the most valuable part of the hay, are saved. One ton of cured alfalfa-leaves are equal in protein-feeding value to nearly one and one half tons of wheat bran. In ordinary hay-making there is more loss from sunburn than from rain.

## SOME MODIFICATIONS OF THE PLAN

These illustrations are reproductions of photographs taken at the time of making

the third crop of alfalfa hay, late in the summer, when the growth was not rank, and the weather conditions were favorable; but the plan can be applied to other hay crops, and modified to adapt it to different conditions, such as machinery at command, unsettled weather, heavy growth, etc. The hay can be mowed in the usual way, teddered as soon as well wilted, raked in small windrows, and then bunched with the rake.

## TWO POINTS ON HAYING

Growing plants take up food from the soil in a dilute solution of water, and all excess of water is exhaled through the leaves. When clover or alfalfa is cut, it is cured into hay by the evaporation of about one half the water it contains. This evaporation takes place through the green and wilting leaves; it cannot take place readily through the stems or through crisp, sunburned leaves. It is therefore necessary to preserve the leaf-structure during the curing to complete the process properly and quickly.

Keep an eye on the weather, particularly at the clearing up of a storm. As soon as the barometer and the weather reports promise fair weather, begin the work by running the mower from the middle of the



FIG. 2—BUNCHING THE WINDROWS



FIG. 3—UPSETTING THE BUNCHES

because it has not been used aright. There are many varieties of the cow-pea, and the selection by the Northern grower is often poorly made. Worse than this, the purpose for which the peas should be grown on any particular field is often misunderstood. The peas may be grown for hay, for seed, for pasture, or simply as a fertilizer. I wish I could impress the owners of thin soils in the North with the fact that the Southern pea can render them more direct benefit than it can even to the owners of rich, warm soils, who get luxuriant growths of the peas for the making of rich hay.

The thin soils of which I write cannot make big

harm, as the first heavy frost will kill all the green stuff. In such a seed-bed—rich, clean and able to hold moisture—the conditions are present for getting a sod. I am not opposing the growing of cow-peas for hay. Such hay has been largely my dependence for winter feed. Neither am I condemning the practice of growing peas to be turned under for a spring crop. This has paid me well. But I do have in mind the great areas of thin and cold land that will not make a luxuriant growth of peas in the North, and that need help in making a sod of clover and grass. Much of this land should have the treatment outlined above.

DAVID.

afternoon until sundown. The night's dew will not damage green clover, and in the morning it will dry off from the swath quicker than from the standing clover. Not only will there be gained a full day for the curing, but something of even greater importance—the advantage that clover cut in the afternoon will cure much faster than when cut in the morning, as there is less water in it. Growing plants take up water from the soil both day and night, and exhale it rapidly during a sunshiny day, but very slowly, if at all, during the night. Therefore don't mow early in the morning, when the plants are gorged with water inside and wet with dew outside.



## Gardening

By T. GREINER

**I** WONDER how the Wild Wonder strawberry will come out. There is nothing wonderful about the plant as yet. There are others that are much thriftier, apparently.

**CHERRIES ARE APPARENTLY SETTING** a full crop here. I hope there will be so many that the birds will leave us some. To get my share I will this time try the mirror device, selecting the choicest trees and varieties for the experiment.

**IN MY VICINITY** sweet clover is a common weed on roadsides and in waste places. If we need the nitrogen bacteria for our alfalfa-fields, all we have to do is to gather up some soil from places where sweet clover grows, and scatter it over the alfalfa-field. These bacteria work on both plants.

**THE MEMORY OF THE OLDEST INHABITANT** is sorely taxed to tell of the spring as late as the present. The end of May is approaching, yet with the exception of asparagus, rhubarb and winter onions, no garden vegetable comes from open ground. Everything is fully two weeks or more behind a normal season.

**DANISH BALL HEAD**, no doubt, is the late cabbage for market. Like others of the Flat Dutch and Drum-head types, it is rather coarse. When we want a real good cabbage for family use we plant a midseason cabbage, like Winningstadt, Succession, or perhaps Vandergaw, and plant it late. Of course, the savoy cabbages stand at the head for quality.

**THE POOR-LOOKING TOMATO-SEEDS** have come up poorly, too. The seeds of my own growing, which were nice and bright, from selected and fully matured specimens, have germinated promptly, and in every case the plants are far ahead, both in evenness of stand and size of plants, of those grown from seeds obtained from seed-houses. Last season surely was a bad one for many vegetables, among them especially tomatoes and vine-fruits. We must blame the season rather than the seedsmen.

**FOR THIS YEAR**, and possibly for next, or until we secure a stock of something better, we will have to get our earliest strawberries from the Michel's Early patch. Some readers may not know it, but this variety makes the strawberry-season at least ten days earlier than for those who grow only the ordinary-season varieties. While not a high-quality berry, nor very large, it is a good deal better, coming from one's own patch, than are the berries that can be procured thus early at the stores, which are shipped from a location two or three hundred miles further south.

**SEED-SELECTION.**—Farmers and gardeners, as a rule, are not careful enough in saving seed from some especially fine vegetable or other crop. We may accidentally get hold of some fine thing—tomato, bean, lettuce, or whatever it may be—and then lose it again, or if a new sport or new development have it lost to the world, simply on account of carelessness and neglect to save seed of the new creation. In many lines it would pay us well to grow our own stock seed. We should always do that with potatoes, corn, etc.

**PEDIGREE STRAWBERRY-PLANTS.**—Reasoning from theory, years ago I had great hopes of a decided improvement of our run-down strawberry varieties, such as the Wilson, by continuous selection of and breeding from healthy plants—that is, plants not yet weakened by the accumulated effect of years of disease. In practical tests I find that the plants obtained through our ordinary channels—namely, the fields of the strawberry-growers who have taken no special pains with such selection and breeding—often give as good results as the much-lauded pedigree plants, if not better.

**POTATO LITERATURE.**—A. S. B., a reader in Chicago, Ill., asks for the title and address of some paper devoted exclusively to potato-raising, if any such exists. I am not aware of the existence of such a paper, and see no prospects of such a paper being published very soon. It could not be made to pay expenses at the present time, although the potato is an important crop, and under good management almost invariably profitable. There are, however, a few books on potato culture, notably Carman's "New Potato Culture" and T. B. Terry's potato book. Both can be had through the regular channels of the agricultural book trade.

**ONIONS FROM SETS.**—Storekeepers have been asking as high as fifty cents a quart for onion sets. That is more than the green onions will be worth in most cases after they are grown from these sets. I would not pay such a price, but rather depend on sowing seed in open ground, even if I had to wait a few weeks longer for the green onions. But perhaps it is easy enough for me to talk thus when I am now having a lot of White Portugal, White Queen, Prizetaker, etc., nicely started in making bulbs. While other gardeners around here have just planted their sets, I have plenty of bunching-onions ready for use or sale, all from seed sown in open ground last summer.

**COST AND RETURNS.**—Even if it should cost twenty dollars in labor and manure to grow small vegetables on one fourth of an acre, I must have the garden, and the returns are big. To me it means a continuous supply of green stuff for the family all summer, when to buy the same things in the open market would mean many times the twenty dollars. But even the small family garden can and should be made self-supporting. I always have something to sell—some radishes, lettuce, peas, carrots, beets, onions, some vegetable or small-fruit plants, rhubarb, berries, etc.,

all of which simply represents my surplus over and above what the family can use, and it brings in money right along. One fourth of an acre in such products often brings ten times the twenty dollars.

**LARGE PUMPKINS.**—A reader writes that O. J. Marsh, of New York, raised from one seed five pumpkins that weighed two hundred and fifty-three pounds and had a combined circumference of over twenty-four feet. These pumpkins gave three thousand six hundred and forty seeds and furnished the pumpkin material for two hundred pies. It is a good report, but I hardly believe that "it beats all records." The mammoth squash at the Chicago World's Fair, more than ten years ago, being really a pumpkin, weighed three hundred and sixty-five pounds. In order to grow that monster the exhibitor mixed about two wheelbarrow-loads of old hen-manure with the soil in the hill, of course quite deep and over a wide diameter. Only one plant was allowed in the hill, and only one specimen of fruit on the plant. I don't care to take so much pains to grow monsters and freaks.

**HARLEQUIN BUG.**—J. R. C., of Cleveland, Tenn., sends me specimens of the harlequin bug, which he says is very destructive to potatoes, cabbage, etc. Fortunately for us, this insect is hardly known here, but further south it is a great pest, and does a great deal of damage to cabbage. The full-grown insect, a gaudy-colored fellow, passes the winter hidden under some rubbish or in a sheltered spot, and begins the business of propagation as soon as spring opens. The destruction of all rubbish and of its hiding-places is about the first thing that should be attended to—of course, during fall or early winter. After it has once got onto the cabbage or other plants it is not easily dislodged, and about the only thing that can be done is to gather the bugs by hand, and throw them into a pail or pan containing some kerosene. As it is a sucking insect (true bug), it cannot be reached with poisons, unless disparene, which is to some extent absorbed into the leaf-tissues and sap, might do it. The insect is quite fond of wild mustard. This might be sown in early spring to attract the bugs, and they might then be destroyed, plants and all, by spraying with clear kerosene.

**DILL PICKLES.**—Mrs. M. B. C. R., of Johnstown, Ohio, asks for a recipe to make dill pickles. The first thing to do, of course, before you can cook a hare is to "catch the hare." In this case, first grow your cucumbers. You want nice large, straight ones, such as you can get by planting White Spine Improved or Improved Long Green on good rich soil, preferably on a piece of sandy loam that has recently been in clover-sod. Keep off the beetles, which in some years is a hard problem to solve. Persistent spraying with Bordeaux mixture to which a little arsenate of lead, or disparene, has been added will be likely to keep the plants in health and save them from the beetles, although it may be that we will have less trouble from insects after the last severe winter than we have had for many years. At the same time make sure that you have the dill. If you buy a five-cent paper of new seed, and sow it in any spot in the garden where it has half a chance, even if soil and cultivation are not as good as that usually given to onions, lettuce or radishes, you will probably have plenty of dill, and this is liable to reproduce itself, weed-like, from year to year if you don't take pains to eradicate it. When you have gathered a lot of pickles (picked just before the seeds begin to develop), nice, smooth and straight, say seven inches long or longer, soak them for twenty-four hours in clean, fresh well-water, then brush them clean with a stiff brush, and pack in layers alternating with layers of grape-leaves and some dill-plants, all previously washed, into a keg, barrel or crock, weight them down with a cover and stone, and finally pour a weak brine (a cupful of salt to a bucketful of water) over them. That is all. In warm weather the pickles will be good to eat in ten days or two weeks.

**A SMALL GREENHOUSE.**—F. J. W., of Hanover, Ohio, asks whether I think it would pay him to build and run a greenhouse thirty feet long by twelve feet wide, the place being a town of near five hundred inhabitants. This question is not easily answered, and cannot be answered by a plain "yes" or "no." Our friend may be able to realize a profit, or he may not. It all depends on local conditions, and especially on management. Whatever crop is grown, whether this be lettuce, radishes, or vegetables or flowering plants, it will cost much more to raise them than when they are grown in large houses, where everything can be arranged more systematically and run more economically than is possible on a small scale. But all this may possibly be made up by comparatively cheap help (the operator, for instance, not having much business during the winter months) and by the good retail prices that may be secured among the townspeople. Where there is a good local demand for flowering plants, geraniums, fuchsias, pansies, verbenas, asters, or even vegetable plants, like tomatoes, egg-plant, peppers, etc., at good prices, even a small greenhouse may pay pretty well. In my own case, where I carry on a family and small market garden, and need early plants, I must have the greenhouse, and I make it pay, too. It is doubtful whether lettuce or radish forcing during the cold winter months and at present coal and labor prices could be made to pay even reasonable profits on a small scale like this. It is different where one can go into it on a large enough scale. The most convenient way to heat such a building is by means of a hot-water heater and two-inch gas-pipes, but it can be done by means of a furnace (grate) and flue, either wood or coal being used for fuel. Build the house in the simplest possible manner. Side walls may be brick, concrete or boards. If boards, set four-by-four-inch posts firmly, and nail matched boards both inside and outside; cover outside with tarred felt, or building-paper and clapboards; glass may be double thick, not less than fourteen inches wide, and either butted or lapped; ventilators should be made to extend the whole length of the building. I am going to put up a structure of this kind (thirty by ten feet) this summer, and may give particulars later on.

## Fruit-Growing

By S. B. GREEN

**C**URRENT-WORM.—J. W. T., Ticonderoga, N. Y. Perhaps the best remedy for the currant, or gooseberry, worm is to spray the foliage with Paris green and water, in about the same proportion as for the potato-bug. This treatment in no way endangers the health of those eating the fruit if it is used a week or two before the fruit is ripe.

**WINEBERRY IN ARKANSAS.**—M. J. A., Austin, Ark. The wineberry will bear in Arkansas. The fruit, however, is quite sour, but it is good for jelly. I do not understand why your plants have never bloomed. The canes should bear the second year after planting, the same as other raspberries. It is possible that you have not the true wineberry, and if you will send me a sample of the foliage I will determine it for you.

**TWIG-BORERS.**—W. R. T., Marigold, Miss. The specimen of apple which you sent on is infested by one of the twig-borers, which is exceedingly troublesome where numerous. There is no known satisfactory remedy for it, and about the only thing that can be done is to wait until the parasites of this insect so increase as to destroy it. In a small way it might be practical to cut off and burn the diseased twigs as soon as the presence of the insect is indicated.

**TRIMMING RED CEDAR AND ARBOR-VITÆ.**—A. M. D., Washington, Kan. Red cedars and arbor-vitæ are easily adapted to various forms and figures. This work should be begun early in the spring, and the pruning carefully attended to during the early part of the season, while the trees are growing rapidly. Of course, if you merely want to prune them into rounded, conical or cylindrical forms, you will find this a very easy matter; but if you wish to get the peculiar forms that are sometimes aimed at, you will find it requires considerable experience and ingenuity.

**ROSE-BUG ON GRAPES.**—B. K. M., Rodi, Pa. The best way of getting rid of the rose-bug on grapes is probably by hand-picking and spraying with Bordeaux mixture as soon as the flowers are well open, and by bagging the clusters; but in any event, to secure a crop it will be necessary to hand-pick to some extent. I would suggest that you try bagging the flowers with one-pound manila-paper sacks. This will work quite satisfactorily in the case of all the common varieties. With the Rogers hybrids and some others that need to be cross-pollinated it will, of course, fail.

**THINNING FRUIT.**—B. H. S. E., Warton, Ont. The only satisfactory way of thinning fruit is that of removing the fruit by hand. This is often a tedious process, but the results under best conditions justify the expense. The methods of thinning by spraying with Bordeaux mixture when the trees are in flower, or by shaking the branches, are not satisfactory. There is comparatively little thinning of fruit done in this country. In the better peach sections it is probably more generally practised than anywhere else. In these places the growers thin the buds by cutting off from one third to one half of the new growth each year, and then after the fruit has set remove enough so that there will be four or five inches between the fruit on the trees. This will seem excessive to many who are not acquainted with the good results that follow such severe treatment.

**WINTERING TENDER ROSES.**—R. C., Altona, Ill. Young rose-plants are quite difficult to winter, and perhaps the safest way for a beginner is to dig and bury them on the approach of severe cold weather in a pile of sand, covering the roots and tops at least one foot deep, then putting on several inches of leaves or other mulch. This should be done in some place where no water will stand. It is customary among nurserymen to winter them over in cellars, but to do this requires great care to prevent them from being injured by fungus. In wintering roses outdoors you will find it a good plan to cover them with an inverted sod, and then put tarred paper over them to keep off the rain, giving good drainage, so that no water will stand around the roots. Of course, this would not be necessary in the case of hardy June roses, but it is very desirable in the case of hybrid perpetuals and roses of about the same degree of hardiness.

**PLUM-CURCULIO—PLUM-POCKET.**—J. H., Houston, Minn. The trouble with your plums that causes the little beads of gum to exude on them originates in the sting of a small snout-beetle which first appears about the time the plums are in flower. This beetle stings the plums, and often causes them to be misshapen. The best remedy is to lay sheets under the trees early in the morning, and then jar the trees slightly, when the beetles will fall to the ground, and may be gathered and destroyed. This should begin as soon as the flowers fall, and be repeated at least every other day until the beetles are destroyed or disappear, which will generally be in about two weeks.—The other trouble of which you complain is known as plum-pocket. In this case the small plums puff out abnormally, and are hollow inside. This is caused by a fungous disease which attacks the fruit when it is very small, or perhaps even when it is in flower. The only satisfactory treatment for this is to spray the trees thoroughly two or three weeks before the leaves appear with Bordeaux mixture made of five pounds of lime, five pounds of sulphate of copper and twenty-five gallons of water. One thorough spraying at the time mentioned will generally give exceedingly good results, but I know of nothing that would be satisfactory at this season of the year. It is a good plan to gather and destroy the infected plums. I regret that you did not write me earlier in regard to the plum-pocket.



## Squabs for Market

THE keeping of pigeons has become a regular business in some sections, compared with ten years ago, and a great deal of interest is now being taken in the pigeon as a source of profit. The first essential is to have a good house and yard, and to have the yard wired, in order to confine the birds. The house should be arranged to permit of abundant floor-room, the nests to be along the sides. The Homer pigeon is largely used, an excellent mating being the Dragoon and Homer. Be sure that the sexes are equal, as pigeons pair and keep the same nests. Mice in the nests must be guarded against, and lice will destroy all profit. Give nesting-materials for the birds, and include tobacco-leaves, which will assist in keeping lice away. Fresh Dalmation insect-powder should be freely used in the nests on the first indication of lice, and cleanliness must be enforced. The yard should be at least ten feet high, of any size preferred, and should have roosting-poles at different heights, on which the birds may alight. Keep a salt codfish hung where the birds can have access thereto, supply gravel, coarsely ground oyster-shells, ground bone, wheat, cracked corn, sorghum-seed, millet-seed, and a green food of some kind, as the birds will help themselves to what is desired by them. The squabs are sold when well feathered, are dry picked, marketed by express, and bring from two dollars and fifty cents to four dollars and fifty cents a dozen. February being the month of highest prices. The rapidity of growth depends upon the food and care. About eight pairs of squabs a year may be expected, depending on mode of management.

## Farmers at the Shows

Every farmer should attend the fairs and poultry-shows, and should also exhibit, as any interest taken in fairs leads to improvement of the flocks. Many farmers are afraid to exhibit, not knowing how to prepare the fowls. It may require work for a while to get the fowls in proper condition, but the pleasure of winning will be ample compensation, although the prize-money is also an inducement. To get ready for an exhibition, begin about six weeks ahead with selected members of the flock, and twice a week oil the legs, combs, wattles and beaks, using a mixture of a gill of lard-oil and a teaspoonful of crude petroleum. This will clean the legs. Two weeks before the time for exhibiting feed sunflower-seed three times a week. Wash the combs, wattles, legs and beaks once a week, and sponge the combs and wattles with a mixture of one part of alcohol to two parts of water. Two days before shipping the birds make a soap-suds from castile soap, and have the suds strong and lathery. Take the tub and birds into a room heated to one hundred and five degrees, wash the birds thoroughly (do not be afraid to rub), and rinse them in another tubful of clean, warm water. Put the birds in a very warm room, and as they will puff up their feathers, on account of the heat, each feather will dry separately and fall into its place. If this is not done the feathers will stick together. Now turn them into a cooler room, so as to avoid sudden changes. Before they start, rub comb, wattles and legs with glycerine, which will protect against frost. At the show wipe off the glycerine, and sponge the comb and wattles with alcohol.

## Injuries to Fowls

Fowls become injured in many ways, and it is difficult to ascertain the cause at times, as the farmer cannot find time to give daily observation and note the peculiarities of the individuals. Lameness is caused mostly by alighting from high roosts. When the roosts are high, the fowls will crowd together, each endeavoring to get to the highest point possible, instinct prompting them to do so in order to avoid danger. If they have a long sweep to fly down, they are seldom injured; but where they are compelled to jump down almost under the roost, the result is a bruise, which becomes hard and callous, being known as bumblefoot. When roosting on tree-limbs, young turkeys frequently become lame because of daily flying to the ground, sometimes partly falling. Warfare among the males, the attacks on the weaker fowls by domineering hens, and accidental injuries are liable to occur among all flocks at any time.

## Gravel for Poultry

Gravel or grit should be sharp, so as to cut as well as grind. During a week or month a large flock will clear away all the suitable gravel from a large area, and it frequently happens that in a field where gravel is apparently plentiful it may really be lacking, so far as supply-

## Poultry-Raising

By P. H. JACOBS

ing the wants of the fowls is concerned, for even on such plots the hens may, by daily foraging over the same space, use up all the available material that is serviceable for grit, as smooth, round gravel will not answer. Hens require something sharp and cutting, or they will be unable to properly masticate their food. The broken china and crockery may be utilized for grit by pounding it into small pieces (about the size of beet-seed) and scattering it wherever the hens forage, as they will search for and find every piece. Pounded glass has been given fowls without injury. Good digestion of the food will lead to thrift in the flock and the production of more eggs.

## Profit in Broods

There is a profit in young chicks hatched by hens at this season, although it does not pay to attempt to secure early chicks in winter if they are to be cared for by hens. A hen can do but little in caring for a brood when the weather is severely cold, but at this season everything is in her favor, and the farmer will have little or no work to do. If a hen rears six chicks to marketable age, she will pay for the time so employed, and also give a profit. It is better to allow hens to hatch broods than to prevent them from sitting, as experience has demonstrated that a hen that is allowed to hatch a brood lays as many eggs in a year (on the average) as one that is prevented from incubating.

## Hardy Breeds

Among the hardy breeds of poultry that thrive well during all seasons of the year may be mentioned the Brahmas, Cochins, Plymouth Rocks, Langshans and Wyandottes. Some breeds may excel them as layers in summer, but in the winter season they will prove as profitable as any, from the fact that they are very heavily feathered and have combs that are not excessively large, which enable them to endure the severely cold weather. The breeds named are of large size, and are also excellent market-fowls, having yellow skin and legs. The Leghorns are also classed among the hardy breeds, and give good results, though they are not of large size.

## Inducing Production

To give in a brief space the best methods of inducing hens to lay would be to advise that the poultryman or farmer should feed no grain at this season to hens having liberty. Allow them to secure their food, and they will be better off. If fed at all, give a pound of

their heads dipped in clean warm water and the eyes washed open, then anointed with vaseline. They then see readily, devour their rations, and begin to gain flesh. As there are so many circumstances affecting different farms or locations, the cause of blindness cannot be given as applied to all, but in a majority of cases it is caused by cold drafts of air directly on the heads of the birds. Even in summer the effect is injurious, especially in damp weather.

## Lice Remedies

Whatever is done now to keep down lice will give good results throughout the summer. Do not wait for the lice to appear and multiply—make war upon them at the start. The real enemies of the farmer are the lice on the bodies of the fowls. While remedies may be suggested, yet the best are the advertised lice-killers, which are as cheap as any home-made kinds, and much better, as they do the work, and therefore save time and labor.

## Hens in the Garden

That a hen and chicks will damage a garden is an old claim, but it is true only when planting the seed. After the plants are well up in growth the hen will do no harm, but will destroy many enemies of the vegetables. She will be too busy traveling among the plants to remain long enough in one place to scratch them up. A gill of millet-seed broadcasted over the garden between the rows will give her sufficient employment if there should happen to be a scarcity of insects.

## Inquiries Answered

**CAUSE OF SMALL EGGS.**—"Subscriber" wishes to know "the cause of his hens laying very small eggs." Probably they are rather fat, to which cause may also usually be ascribed double-yolk eggs, very large eggs and eggs of abnormal shape.

**INCUBATOR-CHICKS.**—Mrs. C. G., North Amherst, Ohio, asks "why incubator-chicks die without apparent cause. She finds some dead in the mornings, although they are usually lively at night." The cause is probably lack of warmth in the brooder at night, which is indicated by the crowding of the chicks for more warmth.

**LOSS OF CHICKS.**—S. A., Hadlock, Va., feeds corn-meal exclusively to her chicks, but states that "they do not thrive, a large proportion having died." Corn-meal is not sufficient for growing chicks, as they should be allowed a variety, such as millet-seed, ground bone, and a little



FEEDING THE CHICKENS

lean meat once a day (at night) to twenty hens. Coarsely ground bone should be scattered where the hens can get it. If in yards, do not overfeed the hens. Give grain sparingly, allowing meat, cut bone, millet-seed, sorghum-seed, and any kind of green food, feeding only twice a day. Variety of food is important, but be careful not to make the hens too fat.

## Blindness in Poultry

At all seasons of the year both adults and chicks sometimes appear to be blind, and the cause may be due to disease or to drafts of air at night. In the morning the eyelids are stuck together so firmly that the birds cannot open them without assistance, and when both eyes are in this condition it cannot feed with facility, as it

has to be guided by hearing and touch, therefore loses flesh for want of food, droops and dies. These drooping chickens can often be saved by having

meat-meal and wheat. If the weather is warm, the fowls should be given a place on a mowed lawn.

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## Live Stock and Dairy

### The New Treatment of Milk-Fever in Cows

THIS affection has been a steadily growing evil among dairy-herds of advanced milking-breeds, becoming not only increasingly prevalent, but more and more fatal, so that it has become justly a cause of dread on the part of the owners of valuable stock.

Milk-fever is peculiarly a disease of heavy-milking cows, and no other class of animal has been bred up to the same exalted standard of great power of digestion and assimilation and enormous yield of milk. The disorder is usually unknown in scrub or common herds, while it is common and deadly in the great milking-breeds—Holstein, Guernsey, Jersey, Alderney, Dutch, Flemish, Ayrshire, Swiss, Norman, red polled and milking shorthorn.

Again, it is unknown with the first or second calf, and becomes increasingly rare as the animal passes its maximum of milk-yield and enters on the stage of decline. From six to ten years of age furnishes the greatest number of cases.

Heavy and rich feeding prior to and just after calving will render the disease relatively common and destructive, and hence the affection can be to a large extent warded off by starving for a fortnight before and a week after calving.

All of these conditions operate toward one end—a suddenly induced plethora in the calving cow. This is further shown in the small size of the blood-globules, which implies a dense, rich condition of the plasma in which these float. The sudden contraction of the womb after the birth, and the more speedy secretion of the water than of the solids of the blood, tend to the further concentration of this liquid. Plethora therefore, both as regards excess and richness of blood, is one of the most marked and essential conditions of milk-fever.

The absorption of toxic matters has been growing in favor as an explanation. Lafosse thought poisons were absorbed from the womb, Abadie and Kaiser from the intestines, Hartenstein from the overworked muscles, Allemani and Gratia from the udder. But the womb shows less putrefactive change in its contents than after a difficult and assisted parturition, and the muscles are much more overworked in the prolonged, obstructed and painful calving than in the easy one in which milk-fever habitually occurs. There seems, therefore, a strong probability that the source of the poison is to be found, if at all, in the udder.

It has been strongly suspected, though it is not yet proved, that the source of the poison is a microbian ferment, and microbes are not uncommon in the milk-ducts apart from this disease. The probability of a microbian origin is very greatly favored by the fact, as noted by Bissauge and the present writer, that certain hamlets and farms habitually furnish cases of milk-fever, while neighboring ones, with the same breeds and apparently the same management, escape; also, by the observation of Russell and Wortley Axe, that the malady will sometimes be suddenly arrested in a herd by the simple expedient of having the cows moved to a new and previously unoccupied stable for calving and for the first nine days thereafter. The sudden production, muscular weakness, unconsciousness and coma, are strongly suggestive of a narcotic poison of microbian origin, and the rapid and complete recoveries are equally in keeping with such theory, the poison having been presumably eliminated or neutralized in the system. Any marked structural change producing equivalent nervous disorder would make no such rapid improvement. Dangerous narcotic poisons (leucomains) may, however, be generated in the system without an invasion of microbes from outside, as when ephemeral fever follows an overexertion, or when the milk becomes poisonous when unduly retained under overexertion and excitement. The suckling is often poisoned under such conditions, and everything points, as we shall see under treatment, to the origin of the milk-fever poison in the udder.

The presence of poisons in the system is further shown in the constancy with which we find sugar in the urine in these cases. This points very directly to disordered function of the base of the brain or liver. It should be stated that the mere presence of sugar cannot be looked upon as the cause of the milk-fever, as the elimination of sugar continues for days after the cow has virtually recovered and is apparently quite well. The quantity of sugar in the urine, however, is in ratio with the violence of the attack, and therefore it is an index to the

amount of the real narcotic poison produced in the system.

A wide variation of temperature from the normal is another indication of the violence of the attack and its gravity. If much below the normal, it implies a specially depressing narcotic poison and a probably fatal issue. A slow rise to (not above) the normal is a favorable indication. A rise above the normal usually implies inflammatory complication in the lungs through inhalation of food products, in the bowels, in the womb or elsewhere. All such cases are to be dreaded, as the system becomes further depressed by the toxins furnished by the microbian invasion of the inflamed part, in addition to those already furnished from the udder. Such accessory infectious inflammations may render unsuccessful the best measures of treatment.

### THE J. SCHMIDT TREATMENT

In 1897 J. Schmidt published his successful treatment of milk-fever by the injection of the teats and milk-ducts with a solution of seven to fifteen grams of iodide of potassium in one litre of boiled water. The solution must have been boiled for fifteen minutes, and cooled to forty degrees centigrade, before injecting. The apparatus for injecting is a small rubber tube, five or more feet in length, having a milking-tube fitted into one end and a funnel into the other. This is to be rendered aseptic by being boiled, and should be kept thereafter in a solution of mercuric chloride (1 to 1,000) until wanted for use. The udder and teats, the hands of the operator and assistants, are thoroughly washed with soap and water, rinsed off with boiled water, and then soaked in a solution of carbolic acid (2 to 100). The udder is milked empty before disinfecting, and is manipulated after the injection to force liquid into all parts of the milk-ducts.

As the result of this treatment the mortality was reduced to seventeen per cent, instead of fifty to seventy per cent under the old treatment.

The avowed object of Schmidt was to check secretion in the gland, for which iodine was especially promising. He even advised the introduction of a little air into the udder, to favor the diffusion of the iodide solution. Others went a step further. Thus Wandinat doubled the amount of the iodide solution injected, and used eserine and pilocarpine hypodermically to rouse the peristalsis of the intestines, and reduced the mortality to five per cent.

### THE INJECTION OF OTHER LIQUIDS

The great success of the Schmidt method inspired a number of veterinarians in both Europe and America to inject the udder with other antiseptic solutions, all of which proved successful in a high degree. Among the solutions injected were those of lysol, cresol, chinol and common salt. Finally the injection of simple water, sterilized by boiling and cooled to blood-heat, proved eminently satisfactory. In the use of these injections it came to be recognized that the more fully the udder was distended the better was the result.

### INJECTION OF GASEOUS AGENTS

Distention of the udder by gas was now a very obvious alternative, but although Schmidt had used some atmospheric air along with his iodide solution, the idea of antiseptics had so preoccupied the minds of the operators that for a time those gases only were used that had some antiseptic power. Kortman used etherized air with success. Oxygen got into very general use, first in Switzerland, then in London, Canada and elsewhere, and as the quarters were well filled with the gas the mortality practically disappeared—every case recovered. The first case of the present writer was a mature Jersey with a record of three pounds of butter daily. She was attacked within twelve hours after calving, and the case should therefore in time past have proved fatal. In one hour she was on her feet, and by the next day she had fully recovered, and has given her usual heavy yield of milk ever since.

### INJECTION OF STERILIZED ATMOSPHERIC AIR

Experiment had advanced so far that the conclusion was unavoidable that the value of the injection lay in its quantity rather than in its quality. The benefit came from the distention of the udder by the overfilling of the milk-ducts, and it mattered little what agent was used, provided that it was bland and non-irritating. This conclusion was strengthened by the experience of the breeders on the island of Jersey. They had suffered heavy losses from

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## Live Stock and Dairy

milk-fever until they fell upon the expedient of omitting to milk out the udder for twenty-four hours after calving, which had at once the happiest result. The disease which had been the scourge of high-class Jerseys was at once "shorn of its terror."

It only remained to fully distend the udder of the affected cow with ordinary atmospheric air which had been robbed of its living germs by filtration, and the triumph over milk-fever became easy and complete. The first case to which I applied this was a mature half-breed Holstein which had been attacked less than twelve hours after calving, and which had been injected with Schmidt's iodide solution, yet eight hours afterward still remained down, unable to rise, in a condition of stupor, and with no sign of discharge of feces or urine. On having my attention called to the case, I at once fully distended the udder with sterilized air, retaining it by means of tapes tied around the ends of the teats, and in a little over two hours she was up, seeking water and even food, passing feces and urine freely, and with bright expression of face and eyes and every promise of recovery. The tapes were now taken off, but no milking allowed until the following day, when the patient appeared to be perfectly well. Since that date she has had the reputation of being the best milker in the heavy-milking herd.

This case is an example of many others in many different hands so invariably successful that there is good warrant for the assertion frequently made that there need be little or no apprehension of a fatal result in even the worst cases of milk-fever if they are promptly subjected to treatment. The modern treatment acts like magic, and seems to hardly admit of a failure.

### DANGERS OF THE TREATMENT AND NEED OF SPECIAL PRECAUTIONS

We must not shut our eyes to the inevitable abuse and danger of the new treatment. The main danger is the introduction of germs into the udder and the setting up of infective inflammation in the gland. Readers will recall the show-cows in Toronto a few years ago, the udders of which were fatally infected by milk injected to make a false show in the prize-ring. Already in Europe, and in the hands of veterinarians, the Schmidt treatment has brought on a small proportion of cases of infective mammitis. How many more such cases will develop if this treatment shall become a popular domestic resort, applied by the dairyman in all sorts of surroundings and

On each end of the cylinder have a projection in the form of a fine tube, on which the rubber tubes are fitted.

Third—In the free end of the rubber tube leading from the cylinder fit a milking-tube, to be inserted into the teat.

Fourth—Sterilize this apparatus by boiling for fifteen minutes, and without touching the milking-tube, wrap it in a towel which has been sterilized in a water-bath or in live steam, dried and ironed.

Fifth—On reaching the patient, draw no milk from the teats, but wash them and the udder thoroughly with warm soap-suds, rinse off with well-boiled (and cooled) water, and apply to the teats, and especially their tips, a five-percent solution of creolin or lysol, taking great care that the teats are allowed to touch nothing until the injecting apparatus is placed in use. As the cow is usually down, they may be rested on a cushion of sterilized cotton or a sterile towel.

Sixth—All being ready, the apparatus is produced, great care being taken to keep the milking-tube from touching any object but the teat, and the middle of the teat being held between the finger and thumb of the left hand, the teat-tube is inserted into the milk-duct with the right. Meanwhile the assistant manipulates the rubber ball until the quarter is as full as it will hold, when the tube is withdrawn and held by its attached end, while the teat is tied with a tape to prevent the escape of the air.

Seventh—The tube is now dipped in strong creolin or carbolic acid, rinsed off in water that has been boiled, and is used on the second teat as on the first, and in turn on the third and fourth, until all four quarters are thoroughly distended and the teats tied.

Eighth—The recumbent cow is to be kept on her breast-bone, and with the head elevated, even if it should be necessary to pack her with straw bundles or to suspend the head by a halter. Lying on her side may develop fatal bloating.

Ninth—If in two hours the cow is not on her feet, nor looking brighter and more intelligent, if she has passed no manure nor urine, and if the air has become absorbed, leaving the udder less tense, the injection of the bag may be repeated under the same scrupulous and rigid antiseptic precautions as at first. This may be repeated later if necessary. In all cases, but especially in severe ones, it is well to keep watch of the cow for twenty-four hours, and if there is any indication of a return of the attack to repeat the treatment by udder-distention.

Tenth—It is the common experience



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with little or no antiseptic precaution? This result is inevitable, but we may feel some consolation in the thought that even so the mortality and loss must be far less than it has been in the past, when at least half the animals attacked by milk-fever died.

To obviate such dangers entirely the treatment must be applied under careful measures of asepsis, such as are used in all work in the bacteriological laboratory. From one who has not had the privilege of such laboratory training, be he veterinarian or layman, we cannot expect perfect results, but we can at least lessen the evils by giving full instructions as to the precautions necessary:

First—Provide an elastic-rubber ball and tubes furnished with valves to direct the current of air, as in a common Davidson syringe.

Second—On the delivery-tube place a cylinder of tin or other metal made in two parts which telescope within each other, making an air-tight joint, and pack this cylinder with sterilized cotton.

that when the cow gets on her feet, or very shortly after, the bowels will move freely and the urine will be discharged copiously, indicating a resumption of the normal nervous functions, and furnishing one of the best guarantees of complete success. If such motions are wanting or limited in amount, the patient should be carefully watched, so that the earliest symptoms of relapse may be detected and the treatment renewed.

If possible the case should be in the hands of an accomplished veterinarian who is not only a trained bacteriologist, but a man of experience and skill in other respects. In the absence of such a one, the enormous mortality of the disease when left to itself or treated according to the obsolete methods would fully warrant an instant resort to the treatment by sterilized air, even at the risk of a small percentage of complications and fatalities.—James Law, F.R.C.V.S., Director New York State Veterinary College, in The Holstein-Friesian World.

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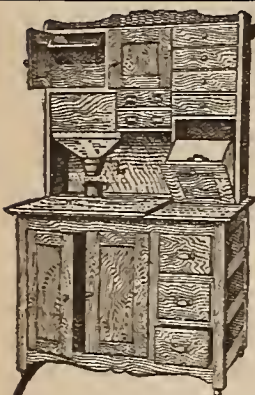
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## The Grange

By MRS. MARY E. LEE

### The Governor's Veto

GOVERNOR HERRICK of Ohio vetoed agricultural appropriations aggregating ninety-five thousand dollars—seventy-five thousand dollars for the department of agriculture of Ohio State University, fifteen thousand dollars for the purchase of an experiment farm in southeastern Ohio, one thousand dollars for the horticultural society and four thousand dollars for the Department of Agriculture. The demand for these appropriations was very insistent, and emanated from the best and most progressive farmers of the state. The bill had passed both houses, in answer to the strong appeal and cogent reasoning. There was not a dollar asked that was not in strict accord with the best interests of the state and sound business reasoning. Farmers have not had their interests so well cared for in the past as to make them free to ask more than is necessary. The appropriations were pruned, and only the most urgent needs were given indorsement. Each department brought its needs before the farmers, and the most necessary were presented to the committees of the house and senate, where they received more pruning. They passed these bodies with pleasing majorities, and went to the governor, where they were vetoed altogether. The veto power was not exercised until the legislature had adjourned.

While the last legislature was the most extravagant of any, and the governor had sent a message urging economy, yet it does seem that there were appropriations allowed that were questionable. For example, the salaries of officials who had made every possible effort to secure office at the old salary were largely increased, some of them without warrant. For instance, members of the Board of Public Works had an increase of from eight hundred dollars to twenty-three hundred dollars per annum, and the increase in all departments was many thousands. And this is annual, not special. Salaries of public officials have not the precedent of lowering themselves. The governor's excuse for not vetoing these was that he was absent when the time limit of ten days expired. His absence was certainly unfortunate for the taxpayers, and the excuse equally unfortunate for him. The action is very generally condemned as an outrage.

I cannot believe that the governor realized how urgent was the need and demand for the department of agriculture of the university, else he would have allowed its claims. Possibly it may be said that there were so many claims he had not time to go deeply into all. So much the more reason for prudence. But there is involved a matter of deeper significance than the vetoing of appropriations. Members of the legislature are in touch with the people of their various districts. They are directly responsible to them for their acts. They represent the people. When they have acted as the majority of the people desire, providing the will of the majority was wise, it is unfortunate for the people that their behests are set aside by the arbitrary act of one man. In this case the appropriation bill was passed in the last days of the session. It was not vetoed until after adjournment, so that there was no possible recourse for the people but to accept. The governor will not be apt to call a special session to rescind his own action.

### Ohio State University

Friends of the university are grieved over the crippling of its work by the loss of the appropriation. More land was an urgent need, and there was an opportunity to acquire it at a bargain. The city is growing so rapidly that real estate is increasing in value. The farm is an urgent need to give the students the best possible advantages, and they who make the sacrifice that is entailed for many to secure an education should have the best of equipment. The agricultural building is ideal, and many who see only Townshend Hall conclude that the other buildings are as adaptive to the needs as it. The conclusion is erroneous. New and modern buildings are needed, better stock and better equipment. No university has a better teaching force, but their work cannot bear the best fruit without needed equipment. Progressive farmers who see in agriculture splendid opportunities for the best brains of the country, and who realize that agricultural science is yet in its infancy, are insistent in their demands for better buildings, stock and equipment, and they will get it, for they have right on their side, and determination. Farmers, come in closer touch with your university. "It is doing a

splendid work for you. Go to visit it. Come in contact with the earnest workers there. See the good it is doing and may do. Support it so earnestly that in the future its usefulness will not be crippled that a few more may feed at the public crib.

### Dragged Roads

Since the publication of the so-called "King method" of road-making I am in receipt of letters and clippings saying that parties will take up the work, and from others that it has been in successful operation in various sections for years. We will let the contestants for the honor of originating the idea settle that question among themselves. The prime matter to the great majority is that time and experience has proved its value. No one can say just where an idea had birth. Evermore peoples and countries sit at the feet of the prophets. And the prophets learned of those of former times, and these again of times before them, for evermore the ages instruct the hours. But growth is eternal. Let the good work grow. Let people take it up where it seems practicable, and all will be benefited.

### The Observatory

Deputy J. C. Pritchard, of Ashtabula County, Ohio, recently organized Buck-eye Grange.

"The real problem of agriculture," said President Thompson of the Ohio State University, "is to make the farmer appreciate his own worth."

Prof. T. C. Atheson, overseer of National Grange, will be present and make addresses both days of the grange reunion at the state fair.

Have you invited the best farmers of your community into the grange? If not, do so. Let your light shine. There are very few farmers who do not believe in organization. They only await your invitation to unite in grange work.

No one can lay claim to cultivation who does not possess some knowledge of the life and thought of those ancient civilizations that have done so much to mold the history of the world. Do not complain of lack of something to read so long as the life-histories of these people are as secrets to you.

No man has a right to ask a woman to take up the duties of a family life unless he can support her, and no woman is wise who will take up such duties without reasonable promise of such support; for marriage means that her earning-power is circumscribed by the new relations of life. Above all is it morally wrong to bring children into the world unless there is some hope of giving them an opportunity to fit themselves for life. These considerations are bound to come after marriage. If they can come before, it will save much heartache and despair.

"To encourage the birth of children without providing properly for their support is to obtain a very small accession to the population of a country at the expense of a very great accession of misery."—Malthus.

"It is not merely the begetting that makes the father," wrote John Chrysostom, "but also the imparting of a noble education."

"The natures that give evidence of being noblest are just those that most require education."—Socrates.

Some farmers seem to think that if they barely make a living, controlling in the effort the lives of the wife and the unfortunate children, that they are doing nothing censurable. It is the duty of every one to acquire and maintain. He owes it to himself, his family, his country. Simply to eke out a living is a negative vice. Before there can be a high type of enjoyment there must be means to purchase the means of enjoyment. Ferret out the sorrow in most families, and at the root of it all is the need of the wherewithal to give to loved ones coveted and desirable pleasures. Earn a little more than you spend, spend for the noblest things of life, and you will find life serene and joyous.

### The New War-Story

Have you read that new war-story which begins in this issue? It is a good one, and there will be some scrambling to see who will get FARM AND FIRESIDE first next time it comes, to read that story, which is continued from this issue to the next.

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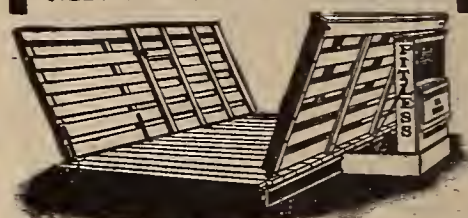
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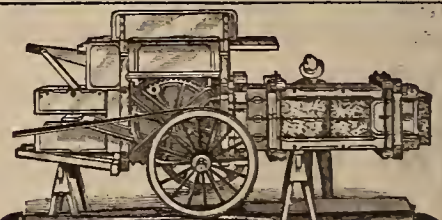


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## The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

### Inheritance by Stepson

T. C., Minnesota, inquires: "B., owning forty acres of land, died without making a will. Can his widow's son by a former husband inherit the property?"

No, he cannot, unless he should get it through his mother. Stepchildren do not inherit from step-parents.

### Inheritance

A. N. B., Kansas, asks: "If a mother dies, and the father does not divide with his children, and marries again, can the children claim anything if the property is sold in case of his separation from his second wife? The second wife had nothing but some household goods at time of marriage. The children were all of age at the time of their mother's death."

This question does not state whether it is real or personal property. I rather think that the children can yet claim whatever they were entitled to at the time of their mother's death.

### Inheritance

A. S., Indiana, asks: "A. married his wife about thirty years ago, both having about an equal amount of property, the wife owning one fourth interest in her father's homestead. A. afterward bought the other three fourths, which was deeded to him, the wife's interest still remaining as at first. They have no children. They have also accumulated other property. If one should die, what would be the conditions with regard to property rights in either case with the one living?"

The inheritance laws of Indiana are rather peculiar, and you had better consult a local attorney.

### Inheritance

C. I., Missouri, wants to know: "A woman having three children by her first husband, and a man having six by his first wife, marry, and have one child. This child marries, and has no children. At her death she has property inherited from her mother, but none from her father. Not leaving any will, how will her property be divided?"

The inquiry does not state whether it is real or personal property. The laws at my command state that it would go equally to father, mother, brothers and sisters. Better consult a local attorney.

### Failure of Consideration of Note

N. S., Michigan, inquires: "Is it necessary to pay a note if the party does not receive the property for which the note was given? If necessary, how could it be collected?"

Want of consideration may be shown to defeat payment of a promissory note if the note has not been sold before due to a person who gives value for the same and acquired the same before it was due. If the note remains in the hands of the original parties, this defense may be set up against its payment.

I must again say that inquiries are answered in the columns of FARM AND FIRESIDE in the order in which they are received, just as soon as space will permit. If an immediate answer is desired, or one within a few weeks, it is better to remit one dollar and receive an answer by mail. Another matter, make your queries short. If they are too long, we may be compelled to omit them unless they are of very general interest.

### Inheritance

J. K., California, says: "Mrs. A. willed her money to friends and others, and her real estate to the church. Mr. A. contested the will, and got the real estate. Mr. A. died, and willed his property to his legal heirs—sisters and brothers. Now comes a young lady, Mrs. A.'s niece, and claims one third of her uncle's property. Please let me know whether she is entitled to any or not."

When the will was set aside, the property passed by the laws of descent, and I find by the laws of California that if there are no children one half will go to the husband, and one half to the decedent's father and mother; if there be no father or mother, sister, brother, nor children or grandchildren of deceased brother or sister, the whole estate goes to such surviving husband or wife. I can hardly see how the niece can claim one third of the real estate. It is difficult to give an absolutely correct answer to the above inquiry for the reason that it is not stated upon what ground the real estate did not go as the will directed, and the laws of almost all states are different and have peculiar exceptions of their own.

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## DEERING HARVESTERS

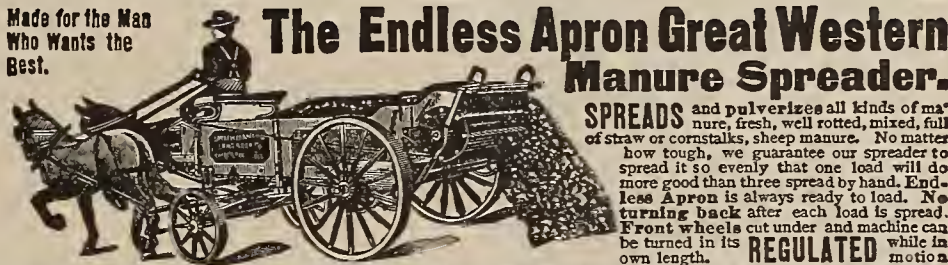
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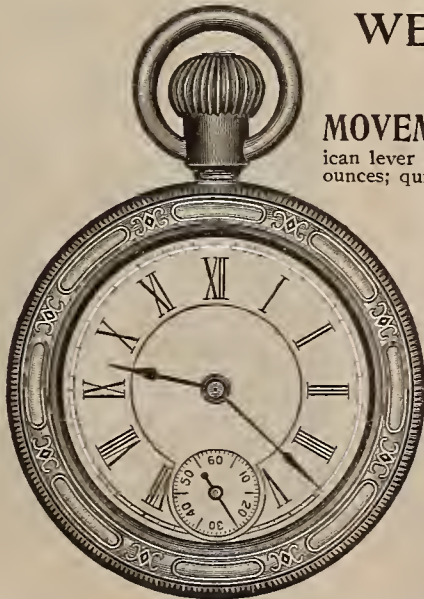
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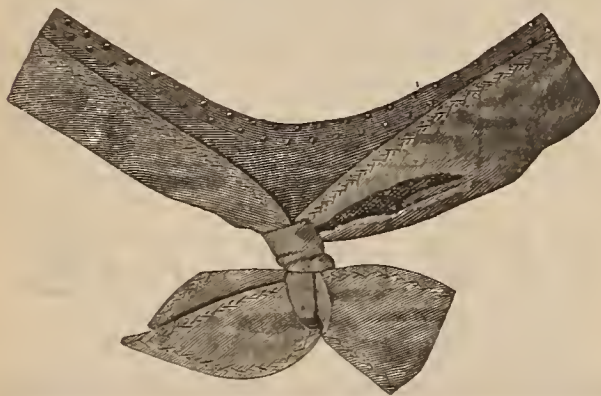
## An "Emergency" Cupboard

TO THE city woman the "unexpected" can usually be provided for on short notice. There are always the bakeries, the butcher, the ever-present grocery, with its fresh and canned things, so that with very little trouble, probably, the unexpected guest can be made comfortable and fed well. To the country woman this is a different matter, for there is no opportunity for augmenting her supplies. It is supposed that in a farm-house there is always milk, cream, butter, eggs, vegetables, etc., but this is not always so. While country people are generous livers, there sometimes happens to be a dearth of things eatable that can be prepared on short notice for the hungry guest, who has, perchance, driven a number of miles for the pleasure of spending a day with her friends.

In these days of the cream-separator and the ever-present creamery the supply of milk and cream are subject to fluctuations. Unless enough is saved out when the milk is separated, there is no chance to get any more. It frequently happens that with the addition of two or three to the table the supply that seemed ample for the home folks runs short. This is not because the farmer's wife is "stingy," or fearful lest the guests will not be able to stand the luxury of milk and cream. Quite often the milk is taken to the creamery at once after milking, and there is less hope for the farmer's wife to get any extra than for the woman in the city. It is the same with cream. I know farmers' tables where cream is used every day, quite to the contrary of the belief of some city folks; but after the cream has gone to the creamery, as it does, there can be no more had until the next milking-time. So while the farmer's wife means to have enough of these things, sometimes they fall short. It is just the same with eggs. It is a good hen that lays all winter, and the majority of farmers do not have hens that lay steadily. So with eggs at forty cents a dozen, and very few of them at that, the woman on the farm perhaps does not make very many angel-cakes or serve ham and eggs as frequently as her city guests think she might.

There are few things that make a hostess more comfortable than the consciousness of having plenty on hand for a good "company" meal. It is a good plan to make some preparation for the times when unexpected guests shall arrive.

Most country women put up pickles, jellies, jams and canned fruits. If there is a supply of these, then with a few main things the getting of a company dinner is not a very serious matter. It is always well to remember that the truest hospitality does not consist in the abundance of the food set forth. It is better to



STOCK No. 1

give one's self to the guests than one's food. It is always a disappointment to go to visit any one, and have that one spend the whole precious time in preparing dainty food.

Most of us have some good cake recipes that we can use, and so have a supply on hand. I have a white-cake recipe that is better for being old. A fruit-cake is also better for standing. With these two one is fairly well supplied with sweets for either dinner or supper. Either cake can be steamed and served with a sauce, and thus make a lovely dessert, or they can be served cold with a dish of peaches, and cream if one has it. I will say right here that if one wants whipped cream, and has nothing but the separated cream on hand, it can frequently be whipped by means of the addition of the whites of one or two eggs. Whip these first, then add the cream, and whip. There is something about separated cream that makes it difficult to whip. I have found that to have it very cold, and to take the top off a can of cream, it will usually whip good. If the cream is scant or not in condition to whip, the white of egg will facilitate matters some.

In the winter one can keep plum-pudding or succ-pudding on hand, and these are just as good warmed over as they are made fresh. Fruit-cookies or any rich cookies rather improve with age, and doughnuts can be freshened and made like new by warming in the oven. This also applies to bread. If this is stale, and there is time, the loaf can be dipped in water quickly, put into a pan, and slowly heated in the oven. It is doubtful if any one could tell that bread so treated is not fresh.

Hot biscuits seem to be the prerogative of the country woman, and with a hot fire it takes but a very few minutes to have these fresh and light for the "unexpected guest." I used to think it required from twenty to thirty minutes to bake biscuits, but I have learned differently. I have actually seen them baked in three minutes, and it is no very great trick to do it in five. However, I like to bake them a little less rapidly. Still, if one is in a hurry, by cutting the biscuits small, rolling thin, and placing them in a pan so they do not

touch, the baking can be done while the family is getting ready to sit down to the table.

While making the biscuit-dough it is a small matter to make enough for a shortcake. This can be spread with any canned fruit available. Red raspberry jam, preserved strawberries or pineapple make especially nice filling. Last year I put my pineapples through a sausage-grinder, and it seems I have never had nicer ones.

In an emergency I once made some individual shortcakes from some biscuits on hand. The biscuits were good to start with. They were dipped in water, and warmed in the oven, then had strawberries and bananas spread between and on top, and served with cream. There wasn't enough strawberries for the whole dessert, but with the addition of the bananas they were eked out, and really the dessert was probably just as good, and some may think better.

It is a mistake to try to get up a city dinner in the country. Maybe we cannot have beefsteak or lamb-chops, and city people want chickens in the country, but it is not always possible to have them. If one has plenty, a few can be killed, then cooked and put in cans, or even in jars, with the liquor poured over them. This will jelly, and so can be kept in a cool place a long time, to be used at short notice. The white meat makes a nice salad, and the dark can be used for a chicken pie just as it is or chopped. In the latter way it can be served on toast or with hot biscuits. In fact, there are so many things that one can have ready for an emergency, that the emergency really never need come, for if one is always prepared to meet it there is no such thing.

It may seem a difficult matter at first to make these little preparations, but when one gets used to it there is great satisfaction in feeling that we need never be anxious about our table, even if some one comes on wash-day. There is only one way to do it, and that is to make the necessary things, and keep them on hand. We need not always have the same things, but by a little forethought our emergency cupboard need never be empty. I do not advocate making cakes and pies to keep. I know of no pie that is half as good after it has stood twenty-four hours. Most cakes are much better the day they are baked, but a few rich ones can be kept and improve by keeping.

Even though some friend or friends may come when we have very little to set before them, let us do this with such a warmth of hospitality, such a freedom from anxiety and excuses, that the guests will feel ready and glad to come again, assured that they will not "put us out," though they cannot let us know when they are coming.

If the city woman only knew the comfort the cup of hot chocolate or tea with the little light refreshment is to the country friend, she would oftener make it ready. It may be that some country people do make "conveniences" of their city friends, and go oftener expecting meals than is consonant with good breeding, but the real refined friend does not do this. Hospitality is the law of love, and it should be lived up to on both sides. It is the subject of many stories—the city friend who goes to the country in the summer, and outstays her welcome—but I am optimistic enough to believe that the real friend is welcome, and that none other need apply. There is a difference in people, and we can soon determine whether or not they come to see us or to partake of our hospitality.

It is better to err by being too kind-hearted than otherwise, but it is just as well not to be imposed upon.

ROSE SEELYE-MILLER.

## Crocheted Silk Lace

This design, made of silk in any preferred color, will be found a handsome trimming for a gown.

Start a square by making a ring of 4 st, ch 9, a d c in third st of ch from hook, a short tr in next st, a tr in next, a long tr in each of the next 2 st, draw the second long tr out a trifle longer than the first one, an extra-long tr (silk over hook three times) in each of the last 2 st, fasten with a d c in ring. Repeat until there are four leaves, then ch 11, a s c in tip of leaf, \* ch 6, a tr in d c that fastened the leaf in ring, ch 6, a s c in tip of next leaf, repeat from \* around. Fasten the last ch 6 in fifth st of ch 11.



## The Housewife



CROCHETED SILK LACE

Make 7 d c under each ch 6, also 1 d c in tip of leaf, and on each of the tr between the leaves. Join the squares to one another while making the d c on the tips of two leaves of a square. Fasten silk in center st of 7 d c, next where the joining would be, \* ch 5, a s c in center of next 7 d c, ch 5, a tr in d c directly over tip of leaf, ch 5, a tr in same place, ch 5, a s c in center of next 7 d c, ch 5, a s c in the following 7 d c, ch 4, a s c in

the 7 d c of next square, repeat from \* to end of row. Work back, and cover the first ch 5 with 5 d c, a d c over the s c of preceding row, ch 4, a d c in same place, 5 d c under next ch 5, then ch 4, fasten on tr, 2 d c in next ch 5, ch 6, catch back in fourth st for picot, ch 2, 2 d c under same ch 5, ch 4, fasten on tr, 5 d c under next ch 5, ch 4, fasten over s c, so continue to end.

HEADING.—Fasten silk in center of 7 d c in upper part of end square, \* ch 4, a s c in d c on tip of leaf, ch 4, a tr in center of next 7 d c, ch 5, extra-long tr in center of following 7 d c, an extra-long tr in center of the 7 d c in next square, draw the two extra-long tr close together at top, ch 5, a tr in center of next 7 d c, repeat from \* to end of row. Work back, make ch 1 spaces. Fasten off.

MRS. J. R. MACKINTOSH.

## To Young Mothers

One of the greatest tendencies of the present day is to let children do as they please. One sees it on the streets, in the cars, at the public stations, and most of all in the homes. The command of "Children obey your parents" is reversed, and it is "Parents obey your children." I often wonder where it will end.

Solomon in his wisdom said, "A child left to himself bringeth his mother to shame," and again, "Train up a child in the way he should go, and when he is old he will not depart from it." If you do not teach children obedience and self-control, what kind of "grown people" can you expect them to be?

It is reasonable that children have not the common sense and judgment to govern their own actions and know always what is best. I have kept my eyes and ears open for years in regard to children, and I am shocked and amazed many times to notice how most mothers, and especially young mothers, let their children rule them and do as they please. If you do not

think that such is the case, notice the management of young children in homes near you and in public places. Children beg for things they should not have, and want to do things they should not do. Well, mother first says, "No, you must not [or cannot]," in a

faltering voice. Still they beg and tease, and if that does not accomplish their desire they set up a howl, and in sheer desperation the mother yields for the sake of peace. Woe to that young mother! She is only laying up misery for the future. Once the child conquers, he knows how to gain his desires, and seldom fails to use his power. Young mother, think seriously before you say "yes" or "no," then stick to it. If the children cry, try to get their minds diverted, or if no other means avail, then as a last resort just give them a good spanking.

Now, I know that the present inclination is toward the belief that it is perfectly inhuman to whip a child, but I have been a close reader, and I notice the sad condition of so many youths who have gotten into terrible trouble and have gone to jails and chain-gangs, all because they were permitted to have their own way. Don't imagine that I am not a mother, and do not know mother-love. Excuse personal mention, but I have two sons grown to manhood and two more "coming," and I know whereof I speak. I never punished my boys until all other means were exhausted, and I have had my grown sons tell me that I did not punish them half enough, and now I am not ashamed of them. A grandfather once told me that the children at home ruled their mother and did as they pleased, and remarked that children were not "raised that way" when he "was a boy." One did not hear in those days of so many young criminals, either.

Young mothers will do well to think of these things.

MRS. W. V. PASCHALL.

## Two Dressy Stocks

These stock collars are made over featherbone foundations, which can be bought at ten cents each.

No. 1, illustrated herewith, was made of black taffeta silk, and the four-in-hand was in red-and-black-plaid silk, the ends of the four-in-hand being themselves tied into a bow with one loop and two ends.

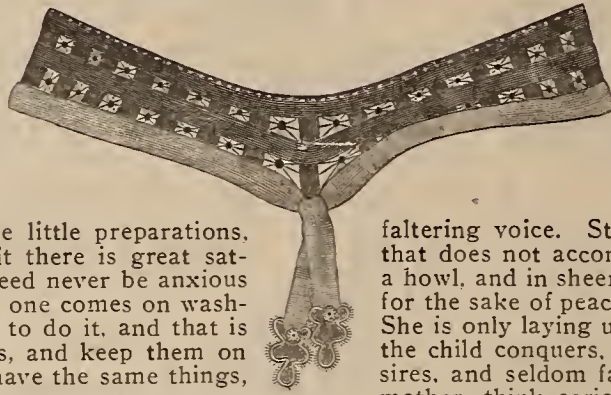
No. 2 was also made over a featherbone foundation. It was covered first with black chiffon, and each "bone" was covered with narrow black satin ribbon placed so as to form squares. In each chiffon square thus formed was a black silk "spider-web." At the base of the collar was a piece of gold braid tied as shown in the illustration and finished with cream-colored lace medallions.

CAROLINE CRAWFORD.

## Original Medallion for Skirt Ornamentation

This medallion is made of black silk fancy braid, and worked with sewing-silk No. E. It is designed to trim the gores of a skirt, being appliqué on two inches from the bottom.

JOYCE CAVENDISH.



STOCK No. 2



MEDALLION FOR SKIRT





### The Lord's Work

"OH, IT can wait until we get ready!" How many of us say that by our actions, if not with our lips. Maurice Smiley puts the thought into dialect verse:

DE LAWD'S WUK

De Lawd He hed a job fo' me,  
But Ah'd so much to do,  
Ah ast Him git somebody e's,  
Aw wait till Ah got froo.  
Ah don' know how de Lawd come out,  
But He seemed to git along;  
But Ah felt kind o' sneakin' like,  
'Kase Ah knowed Ah'd done Him wrong.

One day Ah need de Lawd mahse'f,  
An' need Him right away.  
He nevah answe'd me at all,  
But Ah could heah Him say,  
Way down in mah accusin' heah,  
"Ah's got so much to do,  
Yo' bettah git somebody e's,  
Aw wait till Ah gits froo."

Now when de Lawd He hev a job,  
Ah nevah tries to shu'k.  
Ah draps whatevah Ah's on han'  
An' does de good Lawd's wuk.  
Mah own affaihs kin run along  
Aw wait till Ah gits froo.  
Nobody e's kin do de job  
De Lawd lay out fo' you.

Who was it said his occupation was being a Christian, but he made a living selling dry-goods? Serving the Lord is the first business of every Christian.—Homiletic Review.

### Why Men Don't Go to Church

Several preachers puzzled themselves and their congregations one Sunday recently by trying to discover and explain the reasons why men don't go to church. Now, there is not the slightest mystery about that matter. The men don't go to church simply because they don't believe in the necessity for going.

Censuses of the church-attendance in London, and in New York and other American cities, taken last year, showed that in both countries women and children make up the vast majority of the congregations at churches. Usually it is the same in all the countries of Christendom, with Russia a notable exception, and also some German states. This demonstration of the greater regard for religious observances among the women would be made to appear the more striking if there could be enumerated the large part of men churchgoers who are in attendance simply out of courtesy to their wives or sweethearts, or because they have yielded good-naturedly to feminine persuasions.

The preachers complain that at this time the criticism of sermons has become so severe among men that only very rare abilities in the pulpit can hope to satisfy it. But there is nothing in that suggestion which affords a reasonable explanation of the tendency of men to stay away from church. Intellectually, sermons at this time are probably of a higher order than at earlier periods. Take the period of the so-called "Great Awakening" of 1857, when every Protestant church was crowded to the doors at every service, and theaters had to be called into requisition to make room for the throngs eager to listen to religious exhortations and anxious concerning the salvation of their souls. Generally the preaching was of a low order intellectually. If it was eloquent, the eloquence was merely in its earnest conviction. At a time like this it would be regarded as rhapsody—as a sentimental outburst which defeated itself by its extravagance of emotion.

We are approaching our quadrennial canvass for the presidency. How will it be next autumn, when the campaign gets hot? Every great hall in town will be crowded almost nightly with attentive and enthusiastic men. Latterly women also have taken to attending such political meetings, but relatively they will be far fewer than are the men now in the churches. When men are really interested in the subject, the "cause," or the partizan purpose of a public meeting open to them freely, there is no trouble in getting them to attend it.

If, then, men do not go to church, the reason is that they have not a strong and vital interest in the religion preached. They do not believe in it; they are not devoted to it as they believe in their political principles and are devoted to the political party to which they belong. Usually their attendance at church is

perfunctory if they go at all—it is with them rather an irksome duty than a privilege gladly welcomed. Theoretically, of course, under the teaching of religion, it is their one paramount duty, beside which all other earthly occupations are of utter insignificance. If religion is true, the only pursuit of man of any essential importance is the pursuit of salvation; yet it is among Mohammedans rather than Christians that we see a regard for religious worship which indicates faith in its necessity.

The reason why men do not go to church is obvious enough. It is as apparent as is the reason why a play fails to draw a crowd to a theater. They are not interested in the church because they are not interested in religion. They have not the deep and vital religious faith of which worship is the outward expression. They may think they believe, but actually they do not believe, in the religion they profess. They are not convinced that their fate for all eternity depends on faith in its dogmas and obedience to its obligations.

How to get men to go to church? Let there be a revival of true and genuine religious faith, and the churches will not be large enough to hold them. But no such revival can be started until Christian ministers themselves turn from criticism of Christianity to actual and fervent belief in it as the only means of salvation.—New York Sun.

### "Unto Me"

While it is the plain duty of the church as the body of Christ to do good to the poor and the needy, and alleviate distress wherever found, yet the fact that the church does do this, in no way relieves the individual member from personal responsibility. The language of the Judge of all the earth, as given by the Savior (Matthew 25), is to the individual, "Come ye blessed of my Father, inherit the kingdom prepared for you from the foundation of the world," for "I was an hungred, and ye gave me meat; I was naked, and ye clothed me; a stranger, and ye took me in." Then he adds, "Inasmuch as ye did it unto one of the least of these my brethren, ye did it unto me." To the others he will say, "Depart from me. Inasmuch as ye did it not to the least of these my brethren, ye did it not to me." This will be the final, the irrevocable test at the judgment day—not what your neighbors have done, not what your church has done, but what you as an individual have done or left undone. No class of the human family comes nearer filling the description of the "least of these my brethren" than the little innocent children. Whatsoever we do unto them we do unto Jesus. While not all can take in the little strangers, all can assist to feed and clothe them. If God has intrusted you with some of the good things of this world, you can give of that to assist the work of rescuing children, and then you are preparing yourself to hear the welcome, "Come unto me."—Children's Friend.

### Backbiting

Backbiting is the habit of dogs, and only mean dogs at that; it certainly cannot be a characteristic of good Christians. And as for sanctified persons, we would naturally conclude that they have no teeth to use in this way; it were impossible that they could be found biting at the back of a brother by sly innuendo, by damaging misrepresentation, by tale-bearing and gossip. So it would appear from what is required in the Bible of Christians, and from what is claimed by all professors of sanctification. The scriptures plainly forbid evil speaking, and all professors of perfect holiness assert that the blood of Jesus cleanses from all sin. But what are the facts revealed in practical life? We know that many converted persons are not saved from backbiting; it is a habit with them to do more or less of detraction. And is it not a sad fact that even those who witness to the attainment of full redemption are found sometimes nipping at the backs of their brethren? Their teeth are not sanctified—at least, not wholly.—Dr. A. Lowery, in Divine Life.

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TRIPLE-EFFECT ETON AND PANEL-FRONT FLOUNCED SKIRT

**S**INCE Fashion demands a gown for every occasion, and since each day in these modern times holds so many occasions, the dress problem grows more and more perplexing for the woman whose income is small. The costumes shown on this page are a few of the creations most in demand.

#### Bodice with 1830 Strapped Shoulder and Gathered Flounce Skirt

This gown has been designed especially for the spring bride to wear on her days at home. She will also find it the correct thing for many other occasions, such as little dinners where she is the guest of honor and at informal evening recep-



## How to Dress

there are not enough gathers used to add appreciably to the size of the hips. The lower part of this full skirt is made with a gathered flounce, and the back of the skirt shows full gathers and a slight train. This very lovely frock lends itself admirably to many of the prettiest of the new spring materials. It would be very charming in pompadour silk with the lace band on the skirt matching the lace of the blouse. Bobbinet, with its pretty floral designs, would also be very effective as the material for this gown, as well as the very latest French voile, known as voile Ninon, which is very sheer and is flecked with large, brilliant satin pastils. The pattern for the Bodice with the 1830 Strapped Shoulder, No. 263, is cut for 32, 34, 36 and 38 bust measures. The pattern for the Gathered Flounce Skirt, No. 264, is cut for 22, 24, 26 and 28 waist measures.

#### Lathrop Shirt-Waist

This shirt-waist strikes a happy medium between the severe tailor-made waist and the elaborate blouse. Made of white linen and trimmed with big pearl buttons it is particularly smart in style. The waist has a tucked front and a Spencer back. Stitched bands of the linen trimmed with the pearl buttons emphasize the long-shoulder effect and form the deep cuffs. The stitching for this waist may be white or in any color preferred. It is a model which will also be fashionably correct throughout the spring and summer, and it can be made up effectively in French flannel, with the bands piped with silk. The pattern for the Lathrop Shirt-waist, No. 128, is cut in sizes 34, 36, 38 and 40.

#### Triple-Effect Eton and Panel-Effect Flounced Skirt

Here is a going-away gown which the bride will find useful for many occasions. She may not only wear it and be sure she is well gowned on her honeymoon trip, but it will serve duty as a street-

that is shown in the Eton. The back of this skirt is made with inverted plaits. Mohair is undeniably the most serviceable material for this costume, and mohair in an etamine weave is one of the most fashionable fabrics of the spring. The frock will also be modish if made of cheviot—one of the new smoother-nap cheviots—or in one of the mannish suiting-cloths. The pattern for the Triple-effect Eton, No. 261, is cut for 34, 36, 38 and 40 bust measures. The pattern for the Panel-front Flounced Skirt, No. 262, is cut for 22, 24, 26 and 28 waist measures.

#### Shirt-Waist with Pockets

Here is a shirt-waist which is just a little different from every other shirt-waist. That's why it is sure to prove a much-liked model. To begin with, it's a shirt-waist with pockets, and that's a feature to welcome with joy in itself. The waist is made with a deep yoke both back and front, the yoke running to the waist-line in the form of a narrow plait at the back and a broader plait in the front. The front has also two other plaits—one at either side of the center. The pockets are closed with three narrow buttoned-over straps, and the same triple-strap idea is used to trim the puff of the new leg-o'-mutton sleeve and to add a bit of novelty to the stock collar. The heavier cottons, like cotton damask, momie-cloth and cotton corduroy, are the materials most appropriate for this shirt-waist. However, this waist might be made up effectively of one of the thinner summer fabrics, such as chiffon-finished organdie or plumetis, using ribbons for the straps, and fastening them with gilt or pearl buttons. The pattern for the Shirt-waist with Pockets, No. 300, is cut for 34, 36, 38 and 40 bust measures.

#### Frocks for Little Folks

All the world loves a child, and a pretty child attractively dressed is the best



BODICE WITH 1830 STRAPPED SHOULDER AND GATHERED FLOUNCED SKIRT

favorite combination, as well as tan, red and blue. The belt may be of linen matching in color the collar and cuffs, or of black patent-leather. The pattern, No. 292, is cut in 2, 4 and 6 year old sizes.

#### Child's Shirred Frock

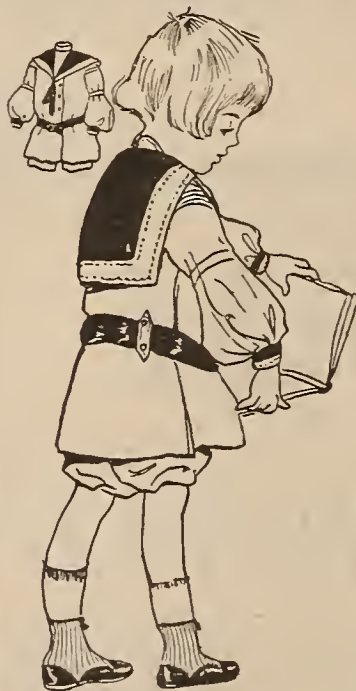
The shirring is the very new feature of this little dress. It is so arranged that it gives the quaint, long-shouldered effect, and also the very long waist, emphasizing



SHIRT-WAIST WITH POCKETS

tions. The bodice, with its long strapped-shoulder effect, introduces a novelty well worth copying. The short Eton, which comes together in the back, is worn over a lace blouse. The front of the bodice and the long-shoulder portion are cut in one piece. The full puff sleeve is cut away at the top to show the lace under the straps and to emphasize the 1830 sloping shoulder. The sleeve is finished with a close-fitting deep lace cuff, that is trimmed with straps to match those on the shoulders. The Eton is gathered to the lace blouse back and front where the straps end. A deep soft girdle finishes the bodice.

The five-gored upper portion of the skirt is gathered to the waist-band, but



BOYS' RUSSIAN SUIT



DRESS WITH ADJUSTABLE YOKE



CHILD'S SHIRRED FROCK

frock all spring and a knock-about costume in the summer. The jacket shows a new variation of the Eton. It is cut short enough to show the wide girdle belt, and its single-breasted fronts have a touch of novelty given them by the triple effect which is introduced. The lower portion of the jacket is cut to show three overlapping pieces. The collar, small revers and turned-back cuffs may be of Oriental embroidery or of cloth or canvas appliquéd with appropriate velvet designs. The sleeve is one of the new bell-shapes.

The skirt, which just escapes the ground all around, is made with a graduated panel front and circular sides and back. The lower part of the skirt carries out the same smart-looking triple effect



BABY'S SHORT DRESS

picture one can look upon. For the mothers who are eager to have their small girls and boys well dressed the frocks shown on this page have been designed.

#### Baby's Short Dress

White lawn and all-over embroidery are used for this dress for baby. The touch of black velvet on the collar and cuffs gives style

to the little frock. The pattern, No. 291, is cut in 6 months and 1 year old sizes.

#### Boys' Russian Suit

Galatea is a good material to use for this suit. White linen would also make the suit very attractive, using dark blue linen for the deep sailor-collar and cuffs. Many of these little suits introduce three colors, dark blue, white and red being a



LATHROP SHIRT-WAIST

the French idea. Madras or linen would be appropriate materials, but if the frock is to be used for a best dress nothing could be lovelier than one of the new dotted silk muslins. The pattern, No. 293, is cut in 4, 6 and 8 year old sizes.

#### Dress with Adjustable Yoke

The style of this little dress adapts itself to almost any material. It would look well in etamine, with the stitching in a contrasting color and the yoke of embroidered scrim or lace, or it could be made of some material like canvas suiting or piqué, with the yoke of all-over embroidery. The pattern, No. 294, is cut in 4, 6 and 8 year old sizes.

#### PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

Our new spring and summer catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.



## How to Know the Mushroom

**B**IRDS, trees and flowers have been favorite themes of song and story since the Assyrian carved his lines on tablets of clay and the Egyptian scribes wrote upon the pith of rushes. Not until within recent years has the mushroom been accorded a place with them as one of Earth's delights.

There are thousands of species of fungi. Among them are a few prolific species which contain a deadly poison, and which annually cause distressing deaths. There are also a few species which contain minor

## Around the Fireside

The cap of the mushroom varies in size from one half inch in the young, or button-shape, to four inches at maturity. It is usually convex, like a biscuit, but frequently becomes nearly plane. It is whitish or brownish, sometimes smooth, sometimes roughened with small, silky, flattened squamulae. The flesh is thick, firm, white, becoming slightly darkened after exposure for some time to the air. It has a pleasant, spicy smell, somewhat woody. The margin extends beyond the plates. The gills are at first pinkish, then purplish, at last purplish brown, almost black. They are rather broad, widest in the center, close, and though they reach the stem they are not attached to it. The stem is from two to four inches long, equal or slightly thickened toward the base. It is whitish inside, stuffed, and is nearly or quite smooth. There is a ring or the remnants of one about the upper part. It never sits in a cup or shows any marks of having had one. It never grows in the woods. If everybody knew this, no one would ever get poisoned.

Growing in similar places are a few species of fungi somewhat resembling

only in effect; and if a person were of a sensitive nature it would have a corresponding depressing effect, and make him low-spirited, when the contrary would be the case under different conditions.

Blue can be used only in a room that is flooded with sunshine. Green can be used in a room lighted either from the north or south. In the former it should be rich and warm in quality, and the sash-curtains could be either rose-color or yellow. A touch of red should be introduced somewhere, to emphasize the value of the green.



LEPIOTA MORGANI

poisons; again, a few which can be eaten by the majority of persons, but that will affect others disagreeably. All of these species resemble the common field mushroom in one or more particulars, yet if ordinary care is taken to know the mushroom there is not the slightest danger of mistaking any other species, either poisonous or edible, for it. The mushroom must be known by its appearance and by its place of growth.

To find the mushroom ("Agaricus campestris") at home one must visit a sodded pasture, grassy lane or well-manured lawn. Here the tumble-bug buries the seed in the ball containing its eggs, or pasturing kine tramp them into soil which favors their germination and the growth of the web-like vine from which the mushroom is produced. The mushroom is a fruit. Crops are often found in April, May and June, but it is late in August, September and well into the colder months that the main crop is produced. On a September morning, after a warm rain has moistened the ground, before the herds begin their tramping, let the mushroom-hunter, with basket and brush, repair to a chosen field whose character promises reward or whose annual bountifulness is known. Here, solitary, in clusters, patches and rings, the choice fungus will be found. When barely above the ground its top is as round as half a marble and joined to a pudgy base. In color it is white, or nearly so, and finely clothed with short, silky fibers. Pick one carefully by twisting it from its unseen vine, and cut it in half from top to base. The whole interior is firm, and the stem will be seen to rise well up into the top, or cap. On the under side of the cap, and attached to it, there are many thin plates, gills, or lamellae, pressed tightly together and to the stem. With the point of a knife or with a pin these delicately pinkish plates can be separated one from the other. Select another on which the cap has begun to spread away from the stem, and cut it in the same manner. The plates are a deeper pink, are more readily separated, and it will be noticed that a membrane, or veil, extends from the edge of the cap to the stem. Examine different stages of the growth up to the fully grown, fully expanded cap. At each progressive stage the plates have grown darker and separated further. After passing to a full pink they become purplish, and at maturity have reached a purplish brown, almost black. The veil tears apart by the expansion of the cap. Portions hang from the margin of the cap as a ragged fringe; portions adhere to the stem as a torn ring about it. In the change of color in the plates and their final color is one absolutely certain mark distinguishing



CLITOCYBE ILLUDENS



CLITOPILUS PRUNULUS

As a rule the darkest colors are on the floor, and gradually lighten toward the ceiling. The hangings should be a trifle darker than the walls, and the ceiling considerably lighter than the walls.

Red seems to be universally used in halls, as they are seldom light, and seem to require red to give a cheerful aspect. But it should be a bright, brilliant color, to overcome the darkness of an unlighted hall. Terra-cotta is not deep enough, and Pompeian and Indian reds are not rich enough.

Color has its influence in apparently increasing or diminishing the size of a room. Blue is called a retreating color, therefore is used only on ceilings, and elsewhere to give an idea of space, or rather of increasing space. On the contrary, yellow is an advancing color, and if it is used generously its effect will be to make a room appear smaller. Red and green make but little difference in this respect.

If olive-green or red-brown be used in conjunction with mahogany furniture, the general effect would be quite different from what it would be if blue were used. Blue would accentuate the tawny orange in the wood, being its complimentary color.

There should be only one decided color in a room, used as a background, against which the others are employed to give value.—Hearth and Home.

## Japan's Venerable Government

It is now quite well established that the Japanese government continued for over two thousand five hundred years exactly the same in form as that of the Mohammedan calif and of modern Rome. The chiefs of religion among the Japanese have been the chiefs of the kingdom much longer than in any other nation. The succession of the pontiff kings may be traced with certainty for more than seven hundred and eighty years before our era. The ecclesiastical emperor was called "Dairi," a name now used by the people for the royal residence of the mikado, or for the court itself. Until recently the mikado was regarded as too sacred to be called by his right name. After the overthrow of the pontiffs the Dairi was kept in honorable confinement by the mikado, and treated with the utmost respect, for the people revered him as devoutly and sincerely as though he were an idol.—Kansas City Journal.

## Heart-Action Photographed

Dr. Charpentier, in a communication before the Paris Academie of Sciences in December, 1903, described an interesting discovery in regard to the possibility of photographing muscular and nervous activity

AMANITA PHALLOIDES  
(Poisonous Woods Toadstool)

PLEUROTUS ULMARIUS



CLITOCYBE MULTICEPS

mushrooms, but whose gills and seeds are always white, with one exception—which is the "Lepiota Morgani." All the other "Lepiotes" are edible. The "Lepiota Morgani" can be eaten and enjoyed by some persons, but to others it is painfully, even dangerously, poisonous.—Charles McIlvaine.

## The Influence of Color

In deciding what color-scheme to adopt for a room the first thing to consider is from which point of the compass it receives its light, the next is the woodwork, and last its size. If the woodwork is of hard wood, it in a measure settles the question, as the woodwork is the key-note to the whole. If it is to be painted or stained, it can be painted or stained to suit any scheme of color one wishes.

A room facing north is without sunshine, and this lack of sunlight should be supplied artificially, by an abundance of yellow or red. Light coming from the north is said to be a cold light, and as blue is a cold color, it should never be used in such a room. The temperature of a room with such a combination would seemingly fall some degrees upon entering from a room rich in color. Of course, it would not actually—



AMANITA MUSCARIUS (Deadly)

on a plate covered with a layer of platino cyanure of barium. Nervous sensations and impressions and muscular efforts are flashed on the plate, and produce a special fluorescence, showing, for instance, the action of the heart and muscles of the interior of the body.—New York Herald.

the mushroom from any fungus having poisonous qualities. The change of color is due to the ripening of the seeds, or spores, which grow upon the outside of the plates.



## CHAPTER I.

## TWO SIDES OF ONE QUESTION

"IT is a bad idea—a bad idea. No such confederation, embracing so much territory, has ever been formed. It can never stand. More than this, I fear our rash politicians have failed to consider the diverse elements that make up our various colonies. Who can hope to bring the luxury-loving Virginians, the aristocratic South Carolinians, the Maryland Catholics, the Pennsylvania Quakers and the austere New England Puritans into such harmony as to found one stable and prosperous government? How long, think you, will this proposed confederation last? Will it not jeopardize our hope of ultimate pardon from the home government? Will not England consider such a step a menace to her peaceful rule here? What is there to gain by such a step? Will we not lose far more than we can ever hope to receive? No, no! I said it before, I say it again—it is a bad idea."

James Meredith paced the floor of his library with steps as hasty as his words were vehement. He was one of Philadelphia's most prosperous merchants, and his wealth was considered fabulous in those days of struggling colonization. His large home was looked upon as a marvel of elegance. His only child, "Miss Margaret," was called "a great heiress." Altogether, what the Merediths thought or said or did was held to be worthy of the highest consideration on the part of their less fortunate townsmen and colonists. Considerable land-grants had been made to James Meredith's grandfather by William Penn, and these had been the basis of the fortune which had grown with each succeeding generation. These grants had also carried with them a large degree of political power, so that now, in the days of 1775, when the whole country, from New Hampshire to Georgia, was in the throes of the revolution against Great Britain, the utterances of James Meredith were not to be lightly esteemed. Accounts of the proposed confederation of the colonies had just reached Philadelphia, and this news was under discussion by Mr. Meredith and his brother-in-law, Robert Miller, at the time our story opens.

To Meredith's utterance Mr. Miller thus made answer: "It may be as you say, James. I grant you there are elements of danger in so pronounced a step. But what else can the colonies do? The king has refused to consider our 'Olive Branch' petition, unjust taxes weigh heavily upon us, and we have no representation in Parliament to secure any relief from these burdens. England has quartered her soldiers upon us, she has oppressed us with wicked governors, she has revoked our charters and canceled our land-grants. She cares for nothing save the revenues which she can drain from us. She has driven us to desperation, therefore we resort to desperate measures. We must protect ourselves. Our people are scattered along a thousand miles of sea-coast, and our borders lie one hundred miles inland. We are composed of diverse elements, it is true; but this very diversity adds to our danger. 'In union there is strength.' We must act together, and there must be some foundation upon which our actions rest. Hence, I hold these Articles of Confederation to be a wise solution of a difficult problem. They may not be the best that could be adopted, but they are the best thing that is offered us under prevailing circumstances. Therefore I must beg leave to differ from you, and to commend this movement, which is of vital importance to us all."

"It may be as you say, brother," returned Mr. Meredith, after some minutes of consideration: "it may be as you say, but I must see something of their outcome before I can venture to risk my business interests by recklessly adopting such radical measures. America has neither men nor money with which to defend herself from the crushing power of the mother country. The officers of the Colonial Army are fresh from the plow and the workshop. How can they hope to conquer the flower of England's well-drilled soldiery? Look at England's fleet, under Clinton's skilled command. What have we to oppose it? A few miserable buccaners, a few blockade-runners and privateers. England can wipe us from the seas as easily as she has closed the ports of the world against us. A little more of this unequal struggle, and our commerce will be totally destroyed. If England wins—as win she must—the expense of our foolish rebellion will be added to the taxes which are already all that we can bear. I grant you that rank injustice has been done us; but is the time ripe for any such rebellion as this? Had we not better wait until we can prepare ourselves for the struggle?"

"And how better could we prepare ourselves than by forming the union proposed by these Articles of Confederation?" asked Miller, quickly, while a gleam of amusement shot from his eyes.

His niece, Margaret, who was an interested listener to this conversation, laughed merrily. "Papa! papa! uncle has caught you fairly," she cried. "As for our soldiers, have not Washington and Putnam and Gates already proved themselves superior to even Clinton and Howe? If the British Army is so powerful and so skilful, why have they not ended the rebellion ere this? There is talk that France may come to our aid. If so,

## Two Girls Against Eighteen Thousand Men

By MARY McCRAE CULTER

are we not sure of victory?" she ended, flushed and breathless from the intensity of her feeling.

"What! what!" exclaimed her father, in response to this outburst. "And are you turned Whig, Mistress Margaret? Have a care! Such outspoken utterances are both unwise and unsafe in perilous times like these. Would you find yourself without a roof over your head, or a morsel of food for your rash mouth? Have a care, my child! As for the hope of aid from France, she is our ancient enemy. Remember how she turned the blood-thirsty Brandt and his savages loose upon our defenseless borders. Think how she massacred our people at Fort William Henry. Think you that the lamb would be any safer if it ran to the wolf for protection from the lion? Then how can we hope that France will be any more merciful to us than our own English kindred will be? Have peace, my



"Are you turned Whig, Mistress Margaret?"

child! Let no such dangerous utterances cross your lips again. Such affairs pertain only to the men of our times. It grieves me to see that the women of our colonies are meddling with matters too grave for their comprehension. They are too rash, too impulsive, too easily swayed by prejudice, to deal with questions of public importance. Let them attend to their families, their spinning and their embroidery, and leave weighty questions to master minds. Again I caution you, Mistress Margaret, speak to no one as you have spoken to your uncle and myself if you value your own and your father's welfare."

Margaret was silenced, but not convinced. Had her father but known it, she was already as pronounced a Whig as General Washington himself. She had adopted the cause of liberty with all the ardor peculiar to a girl of nineteen years, and looked with equal indignation upon the unjust actions of England. Washington was her hero, and she followed the successes and failures of his troops with admiration or sympathy, as the case might be.

Mistress Meredith had died when Margaret was but a little child, but in her aunt, Mistress Miller, the young girl had found an affectionate substitute. Having no children of their own, Mr. and Mrs. Miller had lavished all their affection upon their niece. Much of the girl's time was spent in their home, where she assisted her aunt in the entertainment of the many guests that thronged the hospitable mansion. She was a great favorite with these friends of the Millers, and "pretty Mistress Margaret" was one of the chief at-

tractions to many of the younger persons who visited at her uncle's house. Mr. Miller had adopted the cause of the colonies from the very beginning of the troubles with England, and had made his home a center of Whig influence in the city of Philadelphia. His wife was fully in sympathy with her husband. It is not a matter of wonder, therefore, that amid such influences Margaret had adopted strong colonial prejudices.

James Meredith was a man of few words in his own home. Immersed in extensive business pursuits, he failed to realize that his only child had grown to a companionable age. To him she was still "little Margaret," a child who could not comprehend grave and important subjects. On the death of his wife he had confided the training of his child to his sister, Mistress Miller, assured that she would be as carefully reared as he could desire. Now that war had broken out between the colonies and the mother country, he was much too absorbed in watching his wide-spread business interests to note the political character of the friends by whom Margaret was surrounded. Her impulsive outburst during his conversation with her uncle had been a disagreeable surprise to him. He realized—as she did not—that such words spoken in public would be looked upon as echoes of his private utterances, and be repeated as his political opinions. In thinking them over after his brother-in-law had left him and Margaret had gone to attend to her household duties, he was more and more disagreeably impressed by them. "Margaret has been unduly influenced by her uncle's family," he said to himself. "Robert Miller is a good man, but to my notion he is short-sighted and impulsive. It would be just like him to sacrifice every dollar of his fortune to the desperate cause which he has espoused. He is already marked by the British because he has made his house such a rendezvous of Whigs and their sympathizers. And Mistress Margaret would be a Whig, too! If she will but keep her reckless tongue quiet I do not know but it may prove a good thing after all. 'A house divided against itself cannot stand,'

but a house well propped on both sides is more than likely to weather the storm. Should France lend her aid, and the colonists be successful, it would not be a bad thing to have one's daughter known as an ardent sympathizer with the winning side. The child is growing toward womanhood, and will soon attract much attention by reason of her fair face and fairer manners. It may be that some young officer has already bewitched her romantic heart by his gallantry and his brave uniform. I must caution my sister in regard to this. Meanwhile Mistress Margaret must learn to keep a strict guard upon her tongue. My fortune cannot be imperiled by a young girl's reckless impulses and ignorant prejudices. I will caution her that unless she be more wise in the future she cannot frequent her uncle's house until these troublous times are past."

With this resolve he quieted his disturbed mind, and turned to more congenial contemplation of commercial transactions.

[TO BE CONTINUED]

### A Weird Tale of Abyssinia

A Swiss engineer, M. Ilg, in the employ of King Menelek, the ruler of Abyssinia, tells some strange things about that country, and one of his most weird stories relates to the lobasha, or crime-discoverers. These are boys not more than twelve years of age, who are put into a hypnotic trance, and in this state discover the unknown perpetrators of crimes. Of many of these almost incredible cases of the hunting down of criminals he had personal knowledge. In a case of incendiarism in Adis Abeba the lobasha was called to the spot, and given a cupful of milk into which a green powder had been put. He was then made to smoke a pipeful of tobacco mixed with a black powder, after which he was hypnotized. After a few minutes he jumped up, and began running to Harrar. For fully sixteen hours he ran, and so swift was his pace that professional runners were unable to keep up with him. Near Harrar the lobasha left the road, ran into a field, and touched with his hand a Galla working there. The man confessed.

Menelek wanted to have another proof of the lobasha's gifts. He himself took some jewelry belonging to the empress. A lobasha was sent for. He first ran about in the empress's rooms, then into Menelek's own rooms, went through other rooms, and finally fell down on Menelek's bed.

M. Ilg can give no explanation of this wonderful gift, which seems to be confined to a certain tribe, or perhaps racial confederation, the members of which are distributed over the whole of Abyssinia.

It is also worth remembering that a similar method of discovering crimes was ascribed to the Egyptians four thousand years ago.—Chicago Chronicle.

### A Grand Opportunity

There is a good chance for any one to win one of those free trips to the great St. Louis World's Fair. There is plenty of time left yet to win out. You may have cash if you don't want the trip. A little work will win a prize.



## WHEN THE ROSES BLOOM

Words by Harriet E. Pitzer.

Music by L. C. Gorsuch.

MODERATO.

In a vil-lage called St. John, Dwells a  
I am think-ing of you mother, As the  
Now I'm writ-ing to you mother, Please be

moth-er, old and gray, How I'd love to ca-ress her fond-ly, In that cot-tage far a-way; I can  
days go pass-ing by, And I feel so lone-ly with-out you, That it al-most makes me cry. How I  
pat-ient till I come, Then the house-hold will be brightened, Like a dew-drop in the sun. Tell my

see her in the thresh-hold, Waiting for the man in blue, With a let-ter from her lov'd one Whom she knows is good and true.  
long to see the lov'd ones, Brother, sis-ter, sweetheart, friend, That I'd be just oh, so hap-py, If I was on-ly home a-gain.  
fath-er that I love him, And I hope to see him soon, Now the plants are bud-ding nice-ly, But the ro-ses bloom in June.

CHORUS.

When the roses bloom dear mother, You shall see me at the door Where the postman brought the letters, That I wrote to you before, Then we'll

stroll a-mong the ro-ses, Where we'll smell their sweet perfume, And we'll talk of times to-gether, In the month when roses bloom.





## The Young People

### The Surrender

WHEN the newly wedded wife of Henry Lennox assumed the dictatorship of her husband's household, she discovered three subjects of her little kingdom in open revolt—and a tiny group of revolutionists it was. They were Ethel, Dorothy and Baby Rose—twelve, nine and four years old, respectively—the children of Mr. Lennox's former wife. Of course, Baby Rose was much too young in years to understand what it all meant, but she loyally espoused the cause of her two older sisters. Since their mother's death the care and training of the little brood had been left entirely to the discretion of a housekeeper, with the result that hardly any restraint had been placed upon them. It naturally followed that they should become somewhat self-willed and headstrong.

It was clearly evident to every one that Mr. Lennox had not married the second time as a matter of convenience, even in view of the fact that the provision of motherly care for his children was undoubtedly a great incentive. Their union had been actuated by love alone, and it was a fortunate thing for the motherless three that Agnes Lennox was both lovable and loving, or perhaps all the revolutionary tendencies would have been tearfully terminated in the very beginning of her reign.

When Mr. Lennox had first apprised his children of the advent of a new mama, a vigorous protest had been proclaimed. A new mama was not wanted, and they would not obey her, was at once decreed by the revolutionary trio; but the new mama had been established just the same. And the first thing that the new mama had done was to call the little flock about her, and kiss each one lovingly in turn. But Ethel and Dorothy were not to be won over so quickly. They took the kiss as a matter of course—in rather sullen silence. Baby Rose, however, whose little heart had been fairly aching for motherly affection, promptly extended a pair of chubby, dimpled arms toward her new mama in unconditional surrender. But the watchful eye of Captain Ethel had discerned the maneuver, and Baby Rose felt a vigorous tug at her pinafore. The arms were hastily withdrawn. Probably Baby Rose never realized at that moment how near she had been to becoming a deserter at the first sight of the enemy.

"Children," began the new mama, with a smile, "I'm going to be your mama from now on, and I know we'll be happy together—as happy as we can be. I love you dearly already, and I know you'll love me in return. You will, won't you?" There was a tender note of pleading in her tone.

"I don't want you for a mama," declared Ethel, decisively, turning her curly head away, "and I don't want you to love me."

"Nor me," said Dorothy.

"Me neaser," lisped Baby Rose, with a bewildered stare at her fellow-conspirators. She was struggling to be loyal.

"But my dear little ones," argued the new mama, kindly, "you scarcely know me yet, and surely you cannot decide so quickly. And why don't you want me to love you?"

"Because," stammered Ethel.

"Because," echoed Dorothy.

"Cause," mimicked the tiny third member.

"That's not a very good reason, my dear," said the new mama, softly, taking Ethel's flushed cheeks between her hands, and gazing gravely into the rebellious dark brown eyes. "Do you think it is?" Ethel could not reply to this, and tried to turn her eyes away.

That evening, after the children had gone to bed, Mrs. Lennox sat sewing in the library, with her husband reading on the lounge. Suddenly he laid aside his book, and gazed inquiringly at his wife. "The children?" he questioned, doubtfully. "Do they—have they—" He stopped confusedly, not knowing just how to proceed.

His wife smiled to him reassuringly. "I love them," she said simply.

"And they?" he queried.

"Would rather not have me here," she confessed, laughingly.

"Perhaps I had better talk to them," he suggested.

"Oh, no; not for the world!" she objected, hastily. "I want to win them in my own way, and you really mustn't interfere. Their love and confidence must come to me at the same time, and I think it's only a matter of a little patience. And you'll promise me not to say anything to them, won't you?"

"I promise," he promptly responded; "and I know you'll be successful."

The following day, during the latter part of the afternoon, the three were playing with their dolls in the nursery. It was here that their new mama found them upon her return home from the afternoon's shopping. She greeted them pleasantly, and after seating herself in



BABY ROSE

the big rocker, suggested that she tell them a fairy-tale.

"I don't like fairy-tales," answered Ethel promptly.

"I just hate them!" declared Dorothy.

But Baby Rose was silent. Fairy-tales had a peculiar fascination for her, and the temptation was too great to be overcome. She darted swiftly across the room, and took a position by her new mama's knee. "I does!" she exclaimed.

"Does what, Baby Rose?" asked the new mama, repressing a smile.

"Likes fairy-tales," explained Baby Rose, with a look of defiance at her two sisters. And the next moment Baby Rose was held snug in her new mama's lap, listening to a wonderful story of elves and fairies. From that time on Baby Rose ceased to be a revolutionist, and was never admitted to the councils of war; but she was a very happy little traitor.

A few weeks later the three were taken ill with the measles at the same time. The new mama had her hands full nursing her little patients, but no hands could have been more kind and gentle. And when the fever had finally left them, and she sat reading by their bedside one day, she felt a little hand upon her arm, and looked down into Ethel's serious eyes.

"Mama," came the penitent whisper, as she used the name for the first time, "I do love you."

"And I, too," added Dorothy, eagerly.

"I knew you would, my dears," said the new mama, with shining eyes and a heart of joy.

HARRY WHITTIER FREES.

### "Nelly, Shake Hands"

One day my brother was out driving in the country, when a stranger stopped him by exclaiming, "Hello! that used to be my horse."

"Guess not," replied my brother. "I bought her at a livery-stable, and they told me that she came from Boston."

"M'm!" said the man. "What do you call her?"

My brother answered that the horse was sold to him under the name of "Pink."

"Ho," said the man, "that isn't her name."

Suddenly he cried out, sharply, "Nelly!"

Quick as a flash the horse pricked up her ears and looked around.

"Nelly," said the man, stepping in front of her. "shake hands!"

Up came the horse's right hoof for the man to take.

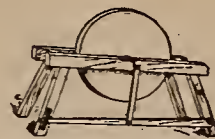
"Now give us the other hand, Nelly." And she raised her left fore foot.

"There!" said the smiling man, "do you suppose that wasn't my horse?"—Our Dumb Animals.

## Prize Puzzles

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Residents of Springfield, Ohio, are not allowed to enter the contests.



## THE FLOWERS PUZZLE

Here are Six Sentences, Each Hiding the Name of a Flower. Can You Find the Flowers?

- 1—The hero secured fame at great cost.
- 2—He plays that viol eternally.
- 3—Be master of circumstance.
- 4—I scoured all the pans yesterday.
- 5—The lark spurns low levels.
- 6—Some minds will ever be narrow.

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before July 1st.

### ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a little book entitled "Short Stories" will be given for the first correct list of answers received from each state and territory. This means a book for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize,

giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the books will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

### ANSWERS TO PUZZLE IN THE MAY 15th ISSUE

#### The Hidden Cities

- |              |            |
|--------------|------------|
| 1—Spokane.   | 4—Buffalo. |
| 2—Mobile.    | 5—Chicago. |
| 3—Cleveland. | 6—Denver.  |

The cash prizes are awarded as follows:

Girl's cash prize, two dollars—J. May Sheperd, East Helena, Montana.

Woman's cash prize, two dollars—Ellen G. Kemp, Whitehouse, New Jersey.

Boy's cash prize, two dollars—Floyd L. Clark, Kyger, Ohio.

Man's cash prize, two dollars—Stanley R. Andrews, Millersport, Ohio.

As a consolation prize a picture, "Queen of Flowers," is awarded to the following persons, whose lists were the first to reach us from their respective states:

California—Annie Ernry, San Jacinto.  
Canada, Assiniboia—John Obert, Frobisher.  
Colorado—Mrs. Lillie Ingerich, Fort Morgan.  
Connecticut—Mrs. E. R. Sutliff, Bridgeport.  
District of Columbia—Miss L. F. Channon, Washington.  
Illinois—A. P. Wylie, Troy Grove.  
Indiana—Miss Virginia Hughes, Columbia City.  
Iowa—Mrs. Alice Rutledge, Tbayer.  
Kansas—J. S. Fisher, Goffs.  
Kentucky—Lela Montgomery, Mount Olivet.  
Missouri—Ellie Denton, Buckner.  
Montana—Arthur Sheperd, East Helena.  
New Jersey—Irene Heacock, Vineland.  
New York—Benj. O. Dixon, Mexico.  
Ohio—Mrs. Louie Woodworth, Carey.  
Pennsylvania—Mrs. R. S. Battles, Girard.  
Vermont—Mrs. A. H. Kennedy, Chelsea.  
Washington—Mrs. Julia Service, Fairfield.  
West Virginia—D. P. Crow, Ripley.  
Wisconsin—Mrs. S. B. Harker, Mineral Point.

#### When de Ha'n'ts is Out

You can't tell me nuffin', fo' yo' ole uncle knows—

Why else he be'n a-livin' all dis time you s'pose?

Why, chile, when I was jes' a-wearin' baby clo'es,

My mammy she had learned me dat on nights lak dese,

When somepin' go a-wailin' troo de ellum-trees,

An' de moon is hid an' de rain a-comin' down.

Dat yo' bettah stay inside whar yo' safe an' soun'.

So, chile, you listen to me—what I tells is true: Fo' a little piccaninny dat's as plump as you;

An' dey ain't no question, an' dey ain't a bit o' doubt,

Dat dis berry blessed ebennin' all de ha'n'ts is out! Fo' when de lightnin' flashes an' de thundah roa',

Den de ha'n'ts all stan' in a row by de do', Fo' dey scent out a niggah every time fo' sho';

An' dey stick dey long noses to de cracks an' smell,

An' ef de darky's fat dey am pleased mighty well, An' dey all switch dey tails, an' dey all lick dey chops,

An' de win' go screech!—an' de broken shuttah flops—

So, chile, you listen to me—what I tells is true: Fo' a little piccaninny dat's as plump as you;

An' dey ain't no question, an' dey ain't a bit o' doubt,

Dat dis herry blessed ebennin' all de ha'n'ts is out! —Anna Spencer Twitchell, in Good Housekeeping.

#### A Different Proposition

Mother (noticing cut on young hopeful's face) —"Tommy, didn't I tell you not to fight any more?"

Tommy—"I haven't been fighting, ma."

Mother—"But somebody struck you."

Tommy—"No, ma, I wasn't fighting at all. It was an accident."

Mother—"An accident?"

Tommy—"Yes, ma. I was sitting on Johnny Ginger, and I forgot to hold his feet."—Religious Telescope.

### An Old Salt's Observations

Love dies of starvation in some bouses, but there's more in which it's indigestion kills it.

Water in a ship's hold can stay at the same level. Love in a household can't—it'll git more or less, as sure as fate.

A woman who was born as misshapen as she makes herself with corsets an' such truck would commit suicide from pure shame about her figger.

Some women are like frogs—not 'cause they're damp an' clammy to th' touch, for that they ain't, but 'cause they much obscure our views of other things.

I passed Jim Brown two weeks ago, when he was walkin' in th' road behind a mule-team, an' forgot to nod to him. This mornin' I passed bim ag'in, when he was ridin' in a carriage, an' I took off my hat an' waved it real cordial like. I wonder why.

Ain't it funny about women that flirt? One of 'em'll stay awake all night thinkin' about th' man that wouldn't wink back at her, while th' chap that fell plumb in love at first sight won't git so much as an extry snort as she cuddles down an' goes to sleep.

Here's a precept that a passenger flung at me after his wife had threatened to git a divorce because he had seen something on th' horizon that he said was a cloud an' she declared it was an iceberg. It had turned out to be a cloud. "Never marry a woman who's in love with you," he says to me, "'cause she'll expect too much," he says. "Never marry one who ain't," he added, "for like enough she'll fall in love with some other man later." Then he went into th' smokin'-room an' told th' steward to bring him a Scotch high-ball.

I went ashore in a foreign port, an' th' people was givin' a humty-roodle-doo in honor of th' king.

"Why?" I asked.

"'Cause he's licked ev'ry nation within reach of him," says a native, "put down forty-six revolutions an' a dog-fight, fooled all th' other countries of th' earth in diplomassy, caught all th' criminals, cured all th' sick, cheered th' unhappy, wrote a historical novel that's had a bigger sale than 'Eben Holden,' solved th' servant problem, squared th' circle, found th' philosopher's stone, straightened out th' currency muddle, done away with tariff arguments, reconciled Tom Platt an' Richard Croker, drove an eight-hoss team with th' reins in his teeth an' a flag in each hand, broke th' record for th' runnin' long jump, an' learned th' Bible so's he can recite it backward with his eyes shut an' a pebble in his shoe."

"Mercy on us!" says I. "He's a great king. Ain't his people happy though? But what makes him look so kind of worried?"

"Oh," says th' man that was a-talkin' to me, "that's because he wants the queen to go to th' sca-shore this summer, an' she says she's goin' to th' mountains."

"Can't he make her go where he wants her to?" I asked.

"Make her?" says th' man. "Why, she's his wife!"

"Oh!" says I.—Edward Marshall, in Judge.

### Eggs of Amazing Size

An egg twelve inches long and ten inches in diameter, with a shell nearly one fourth of an inch thick, will be exhibited among the treasures of natural history by the government at the World's Fair. It is an egg of the apornys, and was recently purchased in Paris by Dr. F. W. True of the Smithsonian Institution. Specimens of these eggs are very rare, having sold in London for as high as one thousand dollars. Compared with other eggs, some idea of its immensity may be had. It will hold the contents of six ostrich-eggs, or one hundred and forty-eight hens' eggs, or thirty thousand humming-birds' eggs. Little is known of the birds from which these eggs come. Most of the eggs are found in the sands and swamps in the southern part of Madagascar. One specimen was found afloat on the ocean after a hurricane, bobbing serenely up and down with the waves.—Facts and Fiction.



## Wit and Humor

### Barbarowski Fritchovitz

Almost hidden beneath the snow,  
Tossed by March winds to and fro,  
The fragile huts of Ping Yang stand  
Out in the Hermit Kingdom land.  
And to this quiet little glen  
There came a troop of Russian men;  
The knee-deep snow they waded through,  
And having nothing else to do,  
Into a thousand threads they tore  
Japanese banners by the score.  
But one old lady stopped the men  
(Her age was just threescore and ten),  
And with clenched fists she gave them  
fits—

'Twas Barbarowski Fritchovitz.  
She took a flag torn by the men,  
And quickly tacked it up again  
To show that she was loyal yet  
To old Japan—lest they forget.  
This angered Captain Barbersitch,  
And in a high, raucous pitch,  
"Halt! Aim! Fire!" he told his men.  
"Rats! Fudge! Lobsters!" screamed  
Barb just then.

A loud report! The flag's in bits!  
But Barbarowski Fritchovitz  
She grabs it up, and takes a stand  
Up at her window, flag in hand.  
"Shootée, if mustee, me knotty-top  
But dissy flagee 'll never dlop."  
The captain felt like thirty yen,  
And started on his march again,  
Saying, "Whoski touches oneski gray  
hair

On thatski red head dieski like a bear."  
And as the Russians left the town,  
Barbara stood with head bowed down,  
And mumbled, "Meow yoni bleens,"  
Which, translated, simply means  
"Had I the whiskers of that troop,  
I'd corner the market in birds'-nest  
soup."

—F. P. Pitzer, in New York Times.

### Success

SAMUEL faced the world confidently,  
although he was but twelve years  
old.

"I already know sixteen different  
ways of being a bore," said he. "What  
have I to fear?"

"And the best of it is," he would often  
say, "not one penny of it was got by  
wronging anybody."—Life.

### Seraphima's Criticism

"'Clar ter gracious!" said Aunt Ser-  
aphima, when the white lady entered her  
cabin, "dese yere p'licemens suttinly is  
gwine drive me plum crazy wid deir in-  
sanitary rules."

"What is the matter now, aunty?"  
asked the visitor.

"Why, jes' dis mawnin' 'long cum one  
ob dese yere constabbles, an' tol' me  
dere so much militarial fevah gwine  
'round dat we mustn' drink nuffin but  
pilfered watah."—Judge.

### Sang About Him

"A Westbrook (Maine) teacher asked  
her pupils one day if any of them knew  
who Nero was," says an exchange. "The  
only response came from an urchin who  
declared that they sang about Nero in  
the Sunday-school. The teacher, who  
could recall no religious music devoted  
to Nero, asked the name of the hymn.  
'Nero, My God, to Thee,' was the con-  
fident answer."—New York Tribune.

### Fixing the Price

Assistant—"There is a woman in your  
studio who wishes to know the price of  
your last picture."

Artist—"Tell her a hundred dollars."

Assistant—"And she says she is a con-  
noisseur."

Artist—"Well, tell her a thousand."—  
Philadelphia Record.

### Aim Higher

"When I say good-by to you this eve-  
ning," said Mr. Slowman, "do you think  
it would be proper for me to place one  
reverent kiss upon your fair hand?"

"Well," she replied, coquettishly, "I  
would consider it decidedly out of place."  
—Philadelphia Press.

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I am but a young man, and I began taking FARM AND FIRESIDE ten years ago, during my second year in Indian-school work. It followed me from place to place during my work, and places where the mail was brought to me on the backs of Indians or their burros. On account of the excellent features and illustrations, I often used FARM AND FIRESIDE as a text-book in my Indian-school work. As our children were coming old enough to begin school we left the Indian service, and bought a forty-acre farm just outside the city of Wichita, Kan. Our farm joins the city limits. We raise our own fruit and vegetables, our children have good school facilities, and we are building up a poultry-ranch of the Rhode Island Red breed. I have successfully put into practice many of the ideas that I got from FARM AND FIRESIDE, and my faith in the paper is shown by the fact that my subscription is paid up to some time in 1906.

Wishing you success, I am

Yours truly,

J. H. BRATLEY.

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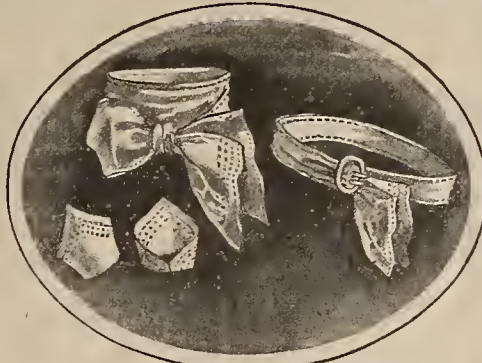
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## The Family Physician

By R. B. HOUSE, M.D.

### Physical Degeneracy

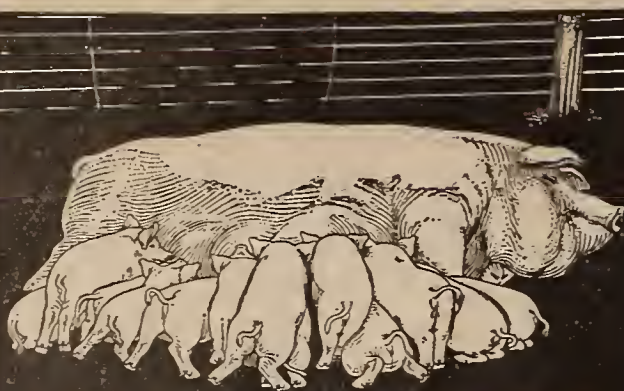
EVERY now and then the alarmist rushes into print with the statement that the race is physically degenerating to an extent that promises early extinction if it is not checked. He points to consumption, anemia, early gray hair, the multiplication of dentists, the increase of dumb, deaf, blind and insane, as confirming his assertion. All these things exist, true enough, but not necessarily as demonstrations of his argument. The rapid development of mind as a world-force has diverted much nervous energy from the uses of the body to the sphere of the mind. High intellectual centers have been specialized, temporarily weakening man's powers of resistance, and making him more sensitive to his environment, and more dependent upon art for the means by which to maintain the equilibrium that is called health.

But degeneration is not a supreme force turned loose to wreak havoc on the race. There are reactionary factors at work. Life is a complex affair. That strange force called evolution has the whip-hand of degeneracy. If we are more delicate to-day than a hundred years ago, we have more vital tenacity, greater will-power, clearer perception. We have the strong arms of sanitation and hygiene to work in our behalf, advanced medical and surgical science to come to our aid in time of need. If our physical senses are less keen, our body less swift to react and adapt itself to environment, if we are not so well nourished, we have acquired in intellectual riches, expanded the boundary of our limitations. Life is longer, is fuller, and it possesses greater meaning. Certain forms of disease have been completely eliminated, others are on the wane. Superstition and fear no longer dominate us. We are on the eve of subtle revolutionary changes in the make-up of man. The study of the nervous system, the blood and the physique has given us a wonderful insight into biological law.

Degeneracy is a superficial view of the present status of man. It is real, and must have the aid of art for its palliation; but in its very soil are sown the germs of a new and higher life.—London Health.

### Early Rising and Longevity

Most persons who have lived to be old have been good sleepers, but this does not mean that they have been long sleepers. A good sleeper is one who sleeps well. He may sleep quite enough in six or seven hours to answer all his needs, and it would be folly for him to lie in bed three or four hours more. As a rule, long-lived persons have been early risers because they have been good sleepers. By "good sleep" is meant sleep that is sweet and sound, without dreaming—refreshing; the body recuperates wholly. Those who love to rise early generally are of this sort. They have strong wills and good health to begin with. Late risers are often invalids, or persons of bad habits—idiots who are never free from other vices besides idleness. The nervous exhaustion which keeps a man wakeful throughout the small hours requires sleep late in the morning. This exhaustion is invariably due to one of several life-shortening influences, especially anxiety, or indiscretion in diet or drink. Early rising is thus rather one effect of certain favorable influences—another result of which is longevity—than a cause of longevity. To turn a weakly man out of bed every morning will not prolong his life unless he has slept enough. Preventing a weakly person from sleeping more than four or five hours nightly would not cause him to live to be old, but would tend to shorten his life. Early rising does not mean the time by the clock—the word has a relative significance with the time of going to bed. A person who retires to rest four hours after midnight and gets up at 10 A.M. may be strictly regarded as an early riser. Thus early rising is synonymous with short sleeping, which means rapid recovery from fatigue, itself a sign of bodily strength. Early rising as a practice may be cultivated by all persons in good health. It is excellent as a moral discipline, and eminently healthy as a matter of fact. Most persons will eat three meals daily. When a man gets up late, those meals will probably follow each other at too short intervals, and be eaten too rapidly to be wholesome. When he is an early riser, it will probably be otherwise. He can enjoy a good breakfast, and when his other meals are due he will be ready for them, and with a good appetite, which is itself one of the signs of health.



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